The Builder.

No. CCLII.

SATURDAY, DECEMBER 4, 1847.

OUR opinions on the subject of competitions are tolerably well known, as is our anxiety to obtain such an administration of them as would prevent the serious mischief to which they now give rise. Advice, exposure, and indignant remonstrance against unjust proceedings, have all failed to produce any useful results, nor can any change be hoped for so long as architects are to be found capable of availing themselves of the errors of the system, and who are therefore interested in maintaining them. So long as architects will supply goods for nothing, and trust for a recognition of their merits to the decision of committees necessarily *incapable* of judging them correctly—open to the influence of friends and connections—glad, indeed, of any thing to guide them in their dark search after what they don't know when they see it—and, being *irresponsible*, not afraid to yield to this influence even when they *do* happen to know better,—so long must architectural competitions remain, even under not worse than ordinary circumstances, a mere game of chance, at which, as there are usually some cheats at the table, the fair player has little chance of success. The prohibition of names, and adoption of mottoes, the impartiality which is to result from the committee's supposed ignorance of any of the candidates, is mere sham and pretence,—a deceit and a snare,—and should be got rid of at once, if irresponsible parties, avowedly not fitted by their calling or pursuits to judge correctly the comparative merits of the designs submitted, are to make the selection. So, too, the old-fashioned notion that it is dishonourable for the competitors, in a case where the worth of the plan is alone supposed to have weight, to canvas their judges, and misrepresent their opponents, may as well be given up, as it is sadly in the way of those few competing architects who are so foolish as still to entertain it. Let each stand on the same ground as his neighbour in this respect at all events, and let the part that ear-wiggery and personal influence are to play be clearly understood.

The degrading effect of open competitions as now conducted, on architects, can scarcely be questioned; and none will deny that alteration is loudly called for, when it is so clearly seen that the character and well-being of the whole profession are at stake.

We have been led to make these remarks by a consideration of the number of competitions at this moment under our notice, and the bickerings and abuse to which some of these have given rise,—subjecting us to such an amount of really painful correspondence as many would scarcely believe in. With regard to special cases, however, we shall refer to this correspondence as little as may be.

The most important of the current competitions, that for the Middlesex Pauper Lunatic Asylum, was decided on Thursday. The committee first selected twelve designs from the whole number sent in, and a sub-committee then pointed out the three which they considered best entitled to the premiums offered, which selection, if we understand rightly, was confirmed by the general board. The following is a list of the successful competitors:—

1st premium—Mr. Daukes.
2nd premium—Mr. George Godwin and Mr. Harris.
3rd premium—Messrs. Allom and Crosse.

We have at present no further particulars of this competition before us, and would therefore of course except it from any reference to our previous remarks.

The committee for erecting a Workhouse for the Aylsham Union, who offered through our columns one hundred guineas to the person whose plan should be approved by the Guardians and the Poor-Law Commissioners, unless he should be afterwards employed in the erection of the workhouse, in which case he would be paid the usual commission, have made their selection from a considerable number of plans which were forwarded to them. According to one of our informants, Mr. Hopkins is the successful candidate, while another (who ought to be equally well informed) says it is Mr. Donthorne. Whichever it may be, the statements show an amount of mystification that may account, in a degree, for some severe comments on the proceedings sent to us by a local observer, who states that the canvassing was scarcely disguised, and that those competitors who, without local influence, sent plans simply in reply to the advertisements, might more usefully have hung them up in their own waiting-room.

The competition for the London Fever Hospital was of a different character, being confined to three architects—Mr. C. Fowler, Mr. Mocatta, and Mr. Railton—with the understanding that fifty guineas would be paid to the two unsuccessful candidates,—a mode of proceeding highly honourable to the committee, and most likely to ensure a good plan. Saved from positive loss by such arrangement, each competitor would be led to give himself wholly to the task, and do his best. The estimate for the building was not to exceed 12,000*l.*; full instructions accompanied the letter, setting forth the requirements both for the hospital and living departments. The hospital was to accommodate 200 patients, half of each sex, with lifts from floor to floor, baths, closets, nurses' rooms, kitchen, sculleries, &c. The wards were to be divided into acute-disease, convalescent, and noisy wards; with a large ward for cases not of fever, but entered as such. The domestic arrangements consisted of the comptroller's, medical officers', and matrons' rooms; surgery, medicine and food lifts, the culinary and servants' departments; bedrooms for the whole establishment; besides the laundry, the usual outbuildings, stores, furnace, engine-rooms, dead-house, &c. &c.

The extent of building necessary to fulfil all these demands, made the question of expense of the greatest consideration. The committee must be aware how cramped the architect is; and it is to be hoped, now the matter is settled, that they may ultimately relax in this respect, and afford increased facilities.

A building committee having examined them, the designs were referred to the medical officers for a report, and on the 19th the general committee decided in favour of Mr. Mocatta. The selected design consists of two wing buildings, two stories high, of double wards, for either sex, connected by corridors with a central building, which is appropriated to the medical officers, board-room, and physician, in front, and extends backwards for the matron, &c., with outbuildings still further removed. The style is Italian.

In the rooms where hang the designs sent in for the London Union Workhouse, the decision on which was mentioned by us last week, a battle of a singular character has been carried on. The author of the 2nd premiated design, Mr. Daukes, strengthened by the fact that the selected design (by Mr. Tress) was placed before his own by a majority of one only, that the decision was deemed irregular by some of the guardians, and that in the chosen plan there is a grave departure from the instructions, has, by the publication of printed papers and verbal declaration setting forth that there is great want of accommodation and means of classification in the selected design, with every thing that can be required in his own, sought to obtain a reversion of the decision.

Making all allowances for the extent to which the author of the second plan may consider himself aggrieved, we cannot hesitate to express a decided disapproval of the course he has adopted. Such proceedings as those we witnessed in the room, on the occasion of a meeting of the various parties interested, pained us more than we can express. The dignity of the profession is compromised by such strugglings,—the artist is lost in the tradesman.

The plot of land on which the workhouse is to be built is a parallelogram, 275 feet wide, in the road from Stratford to London, and about 720 feet deep. The selected plan has the entrance-front next the Stratford-road, that is, the narrow way of the land, and is of the H shape. In the centre, between the lower arms, or those next the road, is placed the chapel; and in a corresponding position between the upper arms, the kitchen; and, extending still further backwards, the dining-hall and infirmary. The plan is compact, and the architectural character good. The style is Italian, with a campanile: the material, brick, with stone dressings.

The main points to be considered, however, and which are properly dwelt on in the instructions to architects, are accommodation and perfect classification; and in these we are compelled to consider the design inefficient. To find where a thousand paupers are to be bestowed with any thing like propriety, requires more ingenuity than we possess. Mr. Tress, however, asserts that they can be provided for. The Poor-law Commissioners must settle the question between us.

We mentioned that the design shewed a grave departure from the instructions. This referred to the fact that the plan is made to occupy 292 feet in width instead of 275 feet, the extent given to the other competitors. This reflects considerably on the guardians, and would seem to justify those members of their body who assert openly that the selection of this design was determined on from the first announcement of the competition.*

Nor is it any answer to the objection to say, that nearly the same arrangement is compatible with the less extent,—the award was made on a design evidently prepared on different in-

* One correspondent, not a guardian, writes as follows:—

"There is the strongest reason for suspecting (from the mere face of things, and apart from rumour) that under *any* circumstances No. 7 was the predestined design, or rather its author the predestined architect. Here is a building committee, who, after troubling by public advertisement forty-two other architects to compete for a workhouse to hold *one thousand paupers*, have selected a design providing accommodation for about 260 paupers, a large number of whom are huddled together in *double beds*; and, still worse, in dormitories usurping parts of the ground-floor, obviously required for day rooms,—albeit the competitors have the satisfaction of knowing that the lucky design displays the 'prettiest' model, and the 'nicest' tinted pictures in gold frames and glass, that are to be seen in the room; and the competitors who have provided for '*one thousand paupers*,' are now told that 'in point of fact accommodation for that number is not required,' or words to that effect. A most unfortunate indifference to *plan* has been manifested, as many of the guardians now seem to be aware, and a motion to call in professional aid to the adjudication was resisted by the chairman of the committee, Mr. Alderman Gibbs. *Vive la bagatelle* seems the only consistent motto for a competition design, and an honest estimate, *fais de sa*."

structions from those followed by the other competitors.

We have no desire to say any thing which may be injurious to the author of any one of the designs; our remarks are directed wholly to the system,—a system which leads to the expenditure of the time, talent, and money, of a large number of persons on a false expectation.

No. 15, the second design, has the entrance-front next the long side of the ground, and presents one long range of building, extending nearly the whole depth of the land, with the infirmary for males at one end and that for females at the other, or next the Stratford road. The main building has a central corridor throughout its extent, open the whole height of the edifice, with balconies for approach to the upper stories, as in the Pentonville Prison and the Clerkenwell House of Detention. The elevation is plain,—an ordinary street front, with cornice and window dressings; but the accommodation is ample, and the means of classification good. No. 18, the third premiated plan (by Mr. Taylor), is an artist-like design externally. The chapel and dining-room, one on either side, are made the prominent features of the front, and the main building, seen behind, has a campanile at each side.

We have left ourselves little space for further remark at present, beyond pointing out one of the designs, which unquestionably deserved to be included in the rewarded list: we allude to No. 40, the authors of which, we learn, are Messrs. Jayne and Young. It unites with the H form of plan, placed in the reverse way from No. 7, namely, with the entrance front next the long side of the ground, two radiating wings at each end extending to the confines of the land, and offering the means of very perfect classification. The style adopted is Elizabethan, and, in an artistical point of view, as well as regards plan, the design has great merit, and eminently deserved to be rewarded.

FIRST REPORT OF THE SANITARY COMMISSION.

IMPORTANT RESULT.

At the moment of going to press we have been favoured with an early copy of the first report issued by the Sanitary Commission, and proceed to lay such extracts from it before our readers, as seem the most important. The necessity for immediate legislation in respect of the sewers of the metropolis, has expedited this report, and prevented attention, at present, to several material points of inquiry. The immediate result of the investigation is, *the suppression of all the Metropolitan Commissions of Sewers*, including those of Kent and Surrey,—but excepting the City Commission,—and the appointment of one smaller body of men, twenty-two in number, who are said to have given attention to sanitary matters.* The report first treats of the prevention of cholera, but to this we cannot now refer. We proceed to those parts relating to drainage:—

"A primary objection raised under the sanitary inquiry to the system of drainage carried out in the metropolis was, that it retained and accumulated decomposing refuse in the sewers. Any system which does this effects the result which sewers were intended to prevent. In the evidence given before the Commissioners of Inquiry into the means of improving the health of towns, the means of remedy were pointed out and demonstrated. The chief means indicated were such alterations of the forms of house-drains and sewers as would increase the rate of flow of the sewer water and diminish the amount of deposit, and keep them clearer with the existing supplies of water; but it was also proved and urged, that for the perfect attainment of these objects, the command of artificial supplies of water was requisite. It may be averred that the principles of these remedies were demonstrated with a degree of clearness which admits of no misapprehension by well-informed minds earnestly directed to the attainment of the object. One of our first topics of inquiry was how far these expositions of evils and principles of remedies, which had now been made known several years, had influenced the subsequent administration of the authorities charged with this class of public works in the several districts;" and they found no result.

Evidence shows that drains should be smaller:—

"In general, the flow of water in the collateral sewers of branch lines of street, even where all the houses drain into them, are mere dribbles, and rarely rise above the invert of the wide bottomed sewers as at present constructed, even in streets where all the houses drain into the sewers. The following are the consequences which take place in various degrees in nearly all the collateral sewers of every form of construction, though the best is the egg-shaped form.

The flow of water, being impeded by the extent to which it is spread, is retarded, and a deposit is created; this deposit becomes indurated to a degree which prevents its being removed by the flow of water occurring in ordinary rainfalls, and is not often considerably affected by any other than the extraordinary storms which occur in intervals of several years.

The accumulations continue, and, during the process, the deposit from the house drains spreads on the sides, and decomposition ensues.

The accumulations in the sewers, as well as in the large house drains which communicate with them, are exposed to the action of much air, usually at such a temperature as greatly to facilitate decomposition.

The accumulations increase until the house drains are entirely stopped up, when the deposit in the sewers is usually removed by the offensive process of hand labour and cartage, leaving the deposit in the house drains untouched."

The report is severe on those who advocate large drains, in the face of contrary evidence:—

"One of the surveyors of the Surrey and Kent sewers, Mr. Joseph Gwilt, the author of an 'Encyclopædia of Architecture,' prescribes a size of drain of five square feet for a moderate-sized mansion, to enable a man to get at it to cleanse it from time to time. The Metropolitan Building Act prescribes that the *least* size of house-drains shall be 9 inches; the hypothesis being that, inasmuch as even these drains accumulate deposit, drains still larger are desirable.

Now, it is proved, that whilst house-drains of such sizes and construction as have been enforced by the Commissioners of Sewers accumulate deposit, drains of a much smaller size keep perfectly clear. Thus, whilst a 12-inch drain, which is required by the Kent and Surrey, and the Tower Hamlets, and the City Commissioners, accumulates deposit and generates noxious gases, a tubular earthenware drain, of nine times less capacity, or of 4 inches in diameter, or, proportional to the house, of from 3 to 6 inches, keeps perfectly clear. Even 3-inch drains convey away the refuse from middle-sized houses, and keep perfectly clear, whilst the larger permeable brick drains, which are usually charged three times the price, are choked up."

On the subject of house-drains, Mr. Phillips, the surveyor of the Westminster district, was asked—

"Have you, in passing along the sewers, ascertained which way the currents of air were flowing, either into or out of the sewers?—In going along the sewers I have been always anxious to ascertain that fact. The light which I had in my hand I have placed immediately by the side of and into the house-drains, and I found, almost invariably, the flare carried into the mouths of the drains, so that there must have been direct currents from the sewers through the house-drains, and so into and through the houses themselves. I rarely met with any instance, where there was not a current from the sewer into the house-drain, and also from the sewer through a large number of the gully-drains into the street. Of course, some gullies have a down draught.

Then it is to be presumed that your experience justifies the general description given of the existing sewers in the Sanitary Report of 1842, as retorts with necks carried into the houses for the conveyance of the gases there?—Yes, unfortunately, such I have found to be the case. The sewers are, in a very great degree, ventilated by the house-drains, which are badly trapped. It was in consequence of finding that to be the fact, by repeated observations and experiments in the sewers, that I was induced to lay before the court their real and absolute state, in order that so grievous an evil might be remedied without delay.

What was done upon your representations?—I cannot say that any steps were taken to remedy the defects; but I can say that it was considered that I was too bold, and that I said too much."

He afterwards shews that efficient drainage may be had for one-sixth of present cost:—

"Will you contrast the expense of the general drainage of streets, courts, and alleys, with the expense at which an improved drainage might be carried out?—I have already stated that the cost of a first-class sewer of the upright-sided form was about 22s. 6d. per foot run., that the present first-class egg-shaped form ordinarily costs about 14s. 2d. per foot run., and that I think the expense, under an entirely different system, with constant supplies of water to keep the sewers clean, might still be further reduced to about 7s. per foot run. for the larger class of branch sewers, and to about 6s. 4d., 5s. 7d., 5s. 3d., 4s. 6d., and 4s. per foot run. for the smaller ones."

The Commissioners remark:—"When it is considered that, in the court of sewers for the chief district, that for Westminster for example, these reductions and amendments of the house-drains, and other proposed amendments, have been met by the positive opposition of a large minority of commissioners, which is sometimes a majority, whose proceedings are described by the witnesses and displayed in their acts,—when the important results of the regulated application of supplies of water, to which attention was directed by the Commissioners of Inquiry, have been passed over without any practical notice, not only in this one commission but in every other,—it will be perceived how slight are the grounds of any expectation of the principle of action in question being followed out, and of being accurately determined and applied by these authorities as at present constituted."

The surveyor having stated that without a plan and system of levels the arrangement of the sewers must be guess-work, was asked,—

"Have you ever represented this opinion to the commissioners?—Yes, repeatedly; both in court, and to individual commissioners out of court. About two years ago, I wrote an article in THE BUILDER, in my own name, in which I urged that no more work should be done until the actual condition of the sewers was ascertained, and a scheme laid down for their entire improvement. This is an extract from that article:—

"'It should be distinctly understood that no more work should be commenced until the sizes and falls of all the sewers have been determined on, and re-arranged according to a regularly graduated scale; and I have no hesitation in saying, that until either this be set about and done, or they be entirely rebuilt, there are very many lines which will never be any other than elongated and filthy reservoirs or cesspools, the matter in which will be continually contaminating the atmosphere with its deleterious products. These great evils require immediate reparation, which should not be done piecemeal, but upon a well-organised system of arrangement; and if the matter be taken up, as I trust it will, the cost of putting the whole of the badly-formed sewers into a state of comparative efficiency could be ascertained without great difficulty.' The paper containing that article was sent to the court by the editor of THE BUILDER."

In conclusion, the Commissioners find,—

"That it is expedient that a commission for the entire drainage of the whole of the metropolis should be appointed, with a special view to such measures, and with aid to carry them out."

"That the execution, by the district courts of commissioners, of large works of drainage or sewerage, without reference to any general plan or survey, involves great risk of erroneous and imperfect works, and waste of the rates

* Of the late Westminster Commission only three members, we believe, are re-appointed, namely, Mr. Bidwell, Mr. F. Byng, and Mr. Leslie. The duties of the new Commission will be very heavy.

they are empowered to levy." And they say,—

"For the prevention of disease and the saving of health and life, by early carrying out efficient works of drainage, and diminishing the mass of atmospheric impurities, by which the public health is depressed; and for the prevention of expenditure upon inefficient works, we feel it our duty to recommend an immediate exercise of the powers of the Crown; and

That the several commissions appointed under its authority, in the metropolis, be recalled with the least possible delay.

That the law of sewers, now administered by numerous persons in these separate districts, be confided to one body of commissioners for the whole of the metropolis.

That to ensure executive dispatch, and obviate that weakening of responsibility which arises from its present division amongst large bodies, the commissioners should be limited in number, and competent — through their known attention to sanitary improvement — to select and sustain the labours of paid officers and the execution of works, in the attainment of this their proper object."

"Concurrently with the immediate works of flushing and cleansing, which the paid officers may be enabled to carry out, we expect that the first work which a consolidated commission must see the necessity of directing to be proceeded with would be the general survey (of the metropolis) by the officers of the Royal Engineers, under the direction of the Board of Ordnance."

They further say:—"It has appeared to be our duty to state, that we have had presented to us ground of exception against one class of appointments to these commissions, namely, that of surveyors, of architects in practice, of builders, traders, agents, and professional persons connected with building operations in their respective districts;" and the report is signed,

"R. Grosvenor,
Edwin Chadwick,
T. Southwood Smith,
Richard Owen,
Richard Lambert Jones."

FURNITURE AND DECORATION.*

Thanks to the exertions of a small number of labourers, the field of art has now become greatly extended; the world is again tending towards that state in which the love of the beautiful is recognised as an ingredient of happiness, and an important aid in civilization.

He who has no desire to surround himself with beautiful works, who chooses, for example, that cup which will merely contain liquid, or that chair which is only comfortable, has little idea that he is renouncing one of the gifts of nature, not less calculated for his enjoyment than any of the senses. With the natural love of beauty implanted, he chooses to *bury* this *talent* in the earth, to exist in the state of him to whom returns not

"Day, or the sweet approach of ev'n or morn
* * * * * * *
* * from the cheerful ways of men
Cut off, and for the book of knowledge fair,
Presented with a universal blank
Of Nature's works, to him expunged and razed,
And Wisdom at one entrance quite shut out."

But such is the state in which doubtless many are yet existing, in the old fallacy that beauty of form must be accompanied by a sacrifice of utility, or in a "haughty ignorance" of the attributes of art, and the pleasures to which they are capable of conducing. With these people, every consideration which the artist deems essential, is troublesome: that which answers the purpose is proclaimed good enough,—although *some* evidence of an attempt at design would shew that they are not as indifferent to elegance of effect as they represent themselves. It is not understood that every amount expended upon that which is not the best that *could* have been designed for the money, is ill-spent. Those who, with ourselves, would wish to see the houses of our friends furnished with such articles of utility as may, in all cases, shew that the artist has been at work, have with this section of the public to carry on the usual battle against ignorance and prejudice. Like other labourers in the educational movement, our prospect is improving, notwithstanding our efforts alike are amongst those who are blind to the pleasures which might reward them, and insensible to the dictates of self-interest. But *our* proselytes are not so much required from the poor and the generally ignorant, as from those who are of reputed education.

It is perhaps the habit of mankind to undervalue requirements belonging to the peculiar vocation of a few; so it is not to be wondered at that some who are not artists should think lightly of the intellect of one who can make the leg of a chair, or the edge of a drapery, matter of serious thought and attention. But, purpose, materials, and cost being considered, design will fail in that which should be its chief object and result, unless it contemplate the very highest excellence which human skill can attain: any thing which can aim at less than perfection according to the premises, is in fact bad art. Both in design peculiarly architectural, in those departments of the art which embrace the furnishing and embellishment of buildings, and in every branch of ornamental and industrial art, it is essential that the general public should be brought to respect the opinions of those who in number possibly are the minority, just as a similar deference is shewn for other opinions, springing from the peculiar vocation of any other body of professors.—Your hospitable friend, who "invites to dine," is not satisfied if he set before his guests juice of the grape which nine out of ten of them would pronounce excellent, but caters for your discriminating palate, that appreciates the excellence of a particular vintage. And, if he has thus a consideration for your enjoyment, it would at least be consistent to minister also to the gratification of your intellectual taste. But, if your friend, when dining in private, for wine of Oporto should substitute blacking of Day and Martin, you might not be able to question his right to take whatever he found digestible, but you would feel interested about him, say for once, there was "no accounting for taste," but resolutely protest against his inviting others to his banquets. So, in intellectual taste, we may not have the power to convince all, at once, of the extent to which they sacrifice the gifts of Nature, by denying themselves enjoyments arising from the cultivation of a love of beauty and of art, but their right to inflict pain upon those who are susceptible of these emotions, and to interfere with the acquirement of these pleasures by others who may now be ignorant of them, is a point which there might be sufficient reason for contending.

There are many reasons for believing that such a conviction is approaching, when the influence of beauty, to civilize and refine, to exert its intended function in the economy of the world, will be found, not only in the works to which art has been hitherto supposed restricted, but as it was once, in every object of household utility. For such a result schools of design were instituted, and to which many recent efforts have contributed.

It has often been said that people will hazard an opinion upon a painting, a statue, or a building, with confidence, which they would shrink from in any other question requiring the possession of peculiar attainments. But this is in a much greater degree the case in other branches of design, forming the subject of the works now before us, in which it is with some difficulty that the world recognizes the presence of art. Therefore it is of the utmost importance that correct views should be communicated by all those who attempt to direct these branches of art in the early stages of their renewed progress, lest, through well-intended but misconceived efforts, mistakes should arise which may prevent art becoming what is hoped for. It is true that correct principles of design, difficult of discovery as they are confessed to be in architecture, are still more difficult in the department of art called "ornamental and industrial." In architecture, for modern purposes the extent to which consistency of style, and observance of precedent should be carried, to the end that the result may gratify the mind, are points upon which it is far more easy to suggest queries than to find definite answers. But in articles of furniture, and in other branches of industrial art, the demand for novelty can scarcely be held otherwise than paramount, even when rules and principles may be clear, and possibly conflicting with it. In architecture, whilst the materials for the exercise of genius are of great extent in comparison with the opportunities of using them, and where combinations of forms previously known, and even familiar, can be made to assume all the beauty, and be worthy of all the praise of excellent works, when governed by the hand of genius,—in furniture, there is a public demand for something which is far nearer to be assimilated to change of fashion in dress. However much an artist may desire to influence the taste of his country, or his time, to a certain extent he must follow it; and in this way we deem that he has no choice but to minister to the passion for novelty, wherever it may exist. In elevations of buildings, though invention is far too little regarded, it is right to estimate that quality as merely one of the objects of the architectural designer, and which can better be dispensed with than outline, proportion, fitness, character, and expression, although governing the arrangement of known forms. Thus the history of design in furniture, presents us with a multitude of changes, and to properly allocate some of these in their chronological order, is occasionally a task, in which the cotemporaneous architectural style affords no suggestion.

Still, whether it becomes the artist to pay that deference to the wants of manufacturers which seems to be required, or whether the unceasing demand for novelty be allowable in a branch of art which has not the stability nor the dignity of that which belongs to buildings, it would be inconsistent to say that there may not be rules, by which the forms of articles of utility, or of decoration, may be governed. We believe, then, first, that whatever form will interfere with the actual purpose in an article of utility, will be unsatisfactory, as part of a work of art; and, also, that the purpose should be evident. The form of an article of furniture, or of any utensil, should be, both actually and obviously, that which is best fitted for the purpose it has to serve, and it may be said, that it is not till those requirements have been satisfied that art comes into consideration. As we happen to have said more than a year ago,—"The type in objects of useful and ornamental [conjoined], is less readily explained than in those of fine art, and may be considered to be rather an embodiment of the principle of utility. Consequently, the forms of those objects must always be such, as it is at once evident are best fitted for the main end. The forms of nature and the rules of art are rather the matters engrafted upon this principle, than *obvious* in the design. The useful end should be completely fulfilled, and without danger of misconception." "All mermaids which turn out to be taper-stands, flowers which are curtain-holders, and bunches of leaves which are jugs, candelabra, or hat-pegs, we take t* originate from entirely erroneous views." We know that cups have been dug up at Pompëii, and elsewhere, which take the form of grotesque heads; and we know that a theory, the reverse of ours, which would make a flower serve the purpose of a candlestick, or disguise the actual use under some other form, is apparently sanctioned by the example of the ancients, and is much in vogue now. But, however beautiful the works which might be shown to us as models, and as arguments against us, they are beautiful only for what they represent, not for what they really are. The case presented to the designer for solution was this—to produce a cup, or whatever object might be intended, which would answer the usual purpose of a cup completely; and, secondly, to invest the form with those attributes of beauty, of which the object was susceptible. But, if one who wanted to drink were uncertain what utensil had the capacity he required, the design failed in one of the most important stipulations. The work might be beautiful as a design, but clearly, the solution of the case presented to the designer had not been approached. In this way, some of the designs for Felix Summerly's "Art-Manufactures" are

* 1. "Designs for Furniture and House Decoration, selected from the Works of the best German and French Ornamentalists. With an Introductory Essay on Ornamental Art. By W. B. Scott, of the Government School of Design, Newcastle." Illustrated by nearly 600 figures in lithography. Fullarton and Co., Edinburgh and London. Parts 1—6.

2. "The Practical Furnishing, Decorating, and Embellishing Assistant; consisting of Original Designs in the Grecian, Italian, Renaissance, Louis-Quatorze, Gothic, Tudor, and Elizabethan Styles of Cabinet and Upholstery Work, Stoves, Ironwork, Chimney-pieces, Glass, China, Clocks, Pianofortes, Silverwork, Chandeliers, Monuments, Epitaphs, Stained-glass, Marquetry, &c. &c. Interspersed with Designs executed for the Royal Palaces, and for some of the principal Mansions of the Nobility and Gentry and Clubhouses." By Henry Whitaker. Fisher, Son and Co. Parts 1—11.

3. "The Practical Cabinetmaker and Upholsterer's Treasury of Designs; in the Grecian, Italian, Renaissance, Louis-Quatorze, Gothic, Tudor, and Elizabethan Styles, &c. &c." By Henry Whitaker. Fisher, Son and Co. Parts 4—13.

* Vide Vol. IV. p. 234.

structions from those followed by the other competitors.

We have no desire to say any thing which may be injurious to the author of any one of the designs; our remarks are directed wholly to the system,—a system which leads to the expenditure of the time, talent, and money, of a large number of persons on a false expectation.

No. 15, the second design, has the entrance-front next the long side of the ground, and presents one long range of building, extending nearly the whole depth of the land, with the infirmary for males at one end and that for females at the other, or next the Stratford road. The main building has a central corridor throughout its extent, open the whole height of the edifice, with balconies for approach to the upper stories, as in the Pentonville Prison and the Clerkenwell House of Detention. The elevation is plain,—an ordinary street front, with cornice and window dressings; but the accommodation is ample, and the means of classification good. No. 18, the third premiated plan (by Mr. Taylor), is an artist-like design externally. The chapel and dining-room, one on either side, are made the prominent features of the front, and the main building, seen behind, has a campanile at each side.

We have left ourselves little space for further remark at present, beyond pointing out one of the designs, which unquestionably deserved to be included in the rewarded list: we allude to No. 40, the authors of which, we learn, are Messrs. Jayne and Young. It unites with the H form of plan, placed in the reverse way from No. 7, namely, with the entrance front next the long side of the ground, two radiating wings at each end extending to the confines of the land, and offering the means of very perfect classification. The style adopted is Elizabethan, and, in an artistical point of view, as well as regards plan, the design has great merit, and eminently deserved to be rewarded.

FIRST REPORT OF THE SANITARY COMMISSION.

IMPORTANT RESULT.

At the moment of going to press we have been favoured with an early copy of the first report issued by the Sanitary Commission, and proceed to lay such extracts from it before our readers, as seem the most important. The necessity for immediate legislation in respect of the sewers of the metropolis, has expedited this report, and prevented attention, at present, to several material points of inquiry. The immediate result of the investigation is, *the suppression of all the Metropolitan Commissions of Sewers*, including those of Kent and Surrey,—but excepting the City Commission,—and the appointment of one smaller body of men, twenty-two in number, who are said to have given attention to sanitary matters.* The report first treats of the prevention of cholera, but to this we cannot now refer. We proceed to those parts relating to drainage:—

"A primary objection raised under the sanitary inquiry to the system of drainage carried out in the metropolis was, that it retained and accumulated decomposing refuse in the sewers. Any system which does this effects the result which sewers were intended to prevent. In the evidence given before the Commissioners of Inquiry into the means of improving the health of towns, the means of remedy were pointed out and demonstrated. The chief means indicated were such alterations of the forms of house-drains and sewers as would increase the rate of flow of the sewer water and diminish the amount of deposit, and keep them clearer with the existing supplies of water; but it was also proved and urged, that for the perfect attainment of these objects, the command of artificial supplies of water was requisite. It may be averred that the principles of these remedies were demonstrated with a degree of clearness which admits of no misapprehension by well-informed minds earnestly directed to the attainment of the object. One of our first topics of inquiry was how far these expositions of evils and principles of remedies, which had now been made known several years, had influenced the subsequent administration of the authorities charged with this class of public works in the several districts;" and they found no result.

Evidence shows that drains should be smaller:—

"In general, the flow of water in the collateral sewers of branch lines of street, even where all the houses drain into them, are mere dribbles, and rarely rise above the invert of the wide bottomed sewers as at present constructed, even in streets where all the houses drain into the sewers. The following are the consequences which take place in various degrees in nearly all the collateral sewers of every form of construction, though the best is the egg-shaped form.

The flow of water, being impeded by the extent to which it is spread, is retarded, and a deposit is created; this deposit becomes indurated to a degree which prevents its being removed by the flow of water occurring in ordinary rainfalls, and is not often considerably affected by any other than the extraordinary storms which occur in intervals of several years.

The accumulations continue, and, during the process, the deposit from the house drains spreads on the sides, and decomposition ensues.

The accumulations in the sewers, as well as in the large house drains which communicate with them, are exposed to the action of much air, usually at such a temperature as greatly to facilitate decomposition.

The accumulations increase until the house drains are entirely stopped up, when the deposit in the sewers is usually removed by the offensive process of hand labour and cartage, leaving the deposit in the house drains untouched."

The report is severe on those who advocate large drains, in the face of contrary evidence:—

"One of the surveyors of the Surrey and Kent sewers, Mr. Joseph Gwilt, the author of an 'Encyclopædia of Architecture,' prescribes a size of drain of five square feet for a moderate-sized mansion, to enable a man to get at it to cleanse it from time to time. The Metropolitan Building Act prescribes that the *least* size of house-drains shall be 9 inches; the hypothesis being that, inasmuch as even these drains accumulate deposit, drains still larger are desirable.

Now, it is proved, that whilst house-drains of such sizes and construction as have been enforced by the Commissioners of Sewers accumulate deposit, drains of a much smaller size keep perfectly clear. Thus, whilst a 12-inch drain, which is required by the Kent and Surrey, and the Tower Hamlets, and the City Commissioners, accumulates deposit and generates noxious gases, a tubular earthenware drain, of nine times less capacity, or of 4 inches in diameter, or, proportional to the house, of from 3 to 6 inches, keeps perfectly clear. Even 3-inch drains convey away the refuse from middle-sized houses, and keep perfectly clear, whilst the larger permeable brick drains, which are usually charged three times the price, are choked up."

On the subject of house-drains, Mr. Phillips, the surveyor of the Westminster district, was asked—

"Have you, in passing along the sewers, ascertained which way the currents of air were flowing, either into or out of the sewers?—In going along the sewers I have been always anxious to ascertain that fact. The light which I had in my hand I have placed immediately by the side of and into the house-drains, and I found, almost invariably, the flare carried into the mouths of the drains, so that there must have been direct currents from the sewers through the house-drains, and so into and through the houses themselves. I rarely met with any instance, where there was not a current from the sewer into the house-drain, and also from the sewer through a large number of the gully-drains into the street. Of course, some gullies have a down draught.

Then it is to be presumed that your experience justifies the general description given of the existing sewers in the Sanitary Report of 1842, as retorts with necks carried into the houses for the conveyance of the gases there?—Yes, unfortunately, such I have found to be the case. The sewers are, in a very great degree, ventilated by the house-drains, which are badly trapped. It was in consequence of finding that to be the fact, by repeated observations and experiments in the sewers, that I was induced to lay before the court their real and absolute state, in order that so grievous an evil might be remedied without delay.

What was done upon your representations?—I cannot say that any steps were taken to remedy the defects; but I can say that it was considered that I was too bold, and that I said too much."

He afterwards shews that efficient drainage may be had for one-sixth of present cost:—

"Will you contrast the expense of the general drainage of streets, courts, and alleys, with the expense at which an improved drainage might be carried out?—I have already stated that the cost of a first-class sewer of the upright-sided form was about 22s. 6d. per foot run., that the present first-class egg-shaped form ordinarily costs about 14s. 2d. per foot run., and that I think the expense, under an entirely different system, with constant supplies of water to keep the sewers clean, might still be further reduced to about 7s. per foot run. for the larger class of branch sewers, and to about 6s. 4d., 5s. 7d., 5s. 3d., 4s. 6d., and 4s. per foot run. for the smaller ones."

The Commissioners remark:—"When it is considered that, in the court of sewers for the chief district, that for Westminster for example, these reductions and amendments of the house-drains, and other proposed amendments, have been met by the positive opposition of a large minority of commissioners, which is sometimes a majority, whose proceedings are described by the witnesses and displayed in their acts,—when the important results of the regulated application of supplies of water, to which attention was directed by the Commissioners of Inquiry, have been passed over without any practical notice, not only in this one commission but in every other,—it will be perceived how slight are the grounds of any expectation of the principle of action in question being followed out, and of being accurately determined and applied by these authorities as at present constituted."

The surveyor having stated that without a plan and system of levels the arrangement of the sewers must be guess-work, was asked,—

"Have you ever represented this opinion to the commissioners?—Yes, repeatedly; both in court, and to individual commissioners out of court. About two years ago, I wrote an article in THE BUILDER, in my own name, in which I urged that no more work should be done until the actual condition of the sewers was ascertained, and a scheme laid down for their entire improvement. This is an extract from that article:—

"'It should be distinctly understood that no more work should be commenced until the sizes and falls of all the sewers have been determined on, and re-arranged according to a regularly graduated scale; and I have no hesitation in saying, that until either this be set about and done, or they be entirely rebuilt, there are very many lines which will never be any other than elongated and filthy reservoirs or cesspools, the matter in which will be continually contaminating the atmosphere with its deleterious products. These great evils require immediate reparation, which should not be done piecemeal, but upon a well-organised system of arrangement; and if the matter be taken up, as I trust it will, the cost of putting the whole of the badly-formed sewers into a state of comparative efficiency could be ascertained without great difficulty.' The paper containing that article was sent to the court by the editor of THE BUILDER."

In conclusion, the Commissioners find,—

"That it is expedient that a commission for the entire drainage of the whole of the metropolis should be appointed, with a special view to such measures, and with aid to carry them out."

"That the execution, by the district courts of commissioners, of large works of drainage or sewerage, without reference to any general plan or survey, involves great risk of erroneous and imperfect works, and waste of the rates

* Of the late Westminster Commission only three members, we believe, are re-appointed, namely, Mr. Bidwell, Mr. F. Byng, and Mr. Leslie. The duties of the new Commission will be very heavy.

they are empowered to levy." And they say,—

"For the prevention of disease and the saving of health and life, by early carrying out efficient works of drainage, and diminishing the mass of atmospheric impurities, by which the public health is depressed; and for the prevention of expenditure upon inefficient works, we feel it our duty to recommend an immediate exercise of the powers of the Crown; and

That the several commissions appointed under its authority, in the metropolis, be recalled with the least possible delay.

That the law of sewers, now administered by numerous persons in these separate districts, be confided to one body of commissioners for the whole of the metropolis.

That to ensure executive dispatch, and obviate that weakening of responsibility which arises from its present division amongst large bodies, the commissioners should be limited in number, and competent — through their known attention to sanitary improvement — to select and sustain the labours of paid officers and the execution of works, in the attainment of this their proper object."

"Concurrently with the immediate works of flushing and cleansing, which the paid officers may be enabled to carry out, we expect that the first work which a consolidated commission must see the necessity of directing to be proceeded with would be the general survey (of the metropolis) by the officers of the Royal Engineers, under the direction of the Board of Ordnance."

They further say:—"It has appeared to be our duty to state, that we have had presented to us ground of exception against one class of appointments to these commissions, namely, that of surveyors, of architects in practice, of builders, traders, agents, and professional persons connected with building operations in their respective districts;" and the report is signed, "R. Grosvenor,
Edwin Chadwick,
T. Southwood Smith,
Richard Owen,
Richard Lambert Jones."

FURNITURE AND DECORATION.*

Thanks to the exertions of a small number of labourers, the field of art has now become greatly extended; the world is again tending towards that state in which the love of the beautiful is recognised as an ingredient of happiness, and an important aid in civilization.

He who has no desire to surround himself with beautiful works, who chooses, for example, that cup which will merely contain liquid, or that chair which is only comfortable, has little idea that he is renouncing one of the gifts of nature, not less calculated for his enjoyment than any of the senses. With the natural love of beauty implanted, he chooses to *bury* this *talent* in the earth, to exist in the state of him to whom returns not

"Day, or the sweet approach of ev'n or morn
* * * * * * *
* * from the cheerful ways of men
Cut off, and for the book of knowledge fair,
Presented with a universal blank
Of Nature's works, to him expunged and razed,
And Wisdom at one entrance quite shut out."

But such is the state in which doubtless many are yet existing, in the old fallacy that beauty of form must be accompanied by a sacrifice of utility, or in a "haughty ignorance" of the attributes of art, and the pleasures to which they are capable of conducing. With these people, every consideration which the artist deems essential, is troublesome: that which answers the purpose is proclaimed good enough,—although *some* evidence of an attempt at design would shew that they are not as indifferent to elegance of effect as they represent themselves. It is not understood that every amount expended upon that which is not the best that *could* have been designed for the money, is ill-spent. Those who, with ourselves, would wish to see the houses of our friends furnished with such articles of utility as may, in all cases, shew that the artist has been at work, have with this section of the public to carry on the usual battle against ignorance and prejudice. Like other labourers in the educational movement, our prospect is improving, notwithstanding our efforts alike are amongst those who are blind to the pleasures which might reward them, and insensible to the dictates of self-interest. But *our* proselytes are not so much required from the poor and the generally ignorant, as from those who are of reputed education.

It is perhaps the habit of mankind to undervalue requirements belonging to the peculiar vocation of a few; so it is not to be wondered at that some who are not artists should think lightly of the intellect of one who can make the leg of a chair, or the edge of a drapery, matter of serious thought and attention. But, purpose, materials, and cost being considered, design will fail in that which should be its chief object and result, unless it contemplate the very highest excellence which human skill can attain: any thing which can aim at less than perfection according to the premises, is in fact bad art. Both in design peculiarly architectural, in those departments of the art which embrace the furnishing and embellishment of buildings, and in every branch of ornamental and industrial art, it is essential that the general public should be brought to respect the opinions of those who in number possibly are the minority, just as a similar deference is shewn for other opinions, springing from the peculiar vocation of any other body of professors.—Your hospitable friend, who "invites to dine," is not satisfied if he set before his guests juice of the grape which nine out of ten of them would pronounce excellent, but caters for your discriminating palate, that appreciates the excellence of a particular vintage. And, if he has thus a consideration for your enjoyment, it would at least be consistent to minister also to the gratification of your intellectual taste. But, if your friend, when dining in private, for wine of Oporto should substitute blacking of Day and Martin, you might not be able to question his right to take whatever he found digestible, but you would feel interested about him, say for once, there was "no accounting for taste," but resolutely protest against his inviting others to his banquets. So, in intellectual taste, we may not have the power to convince all, at once, of the extent to which they sacrifice the gifts of Nature, by denying themselves enjoyments arising from the cultivation of a love of beauty and of art, but their right to inflict pain upon those who are susceptible of these emotions, and to interfere with the acquirement of these pleasures by others who may now be ignorant of them, is a point which there might be sufficient reason for contending.

There are many reasons for believing that such a conviction is approaching, when the influence of beauty, to civilize and refine, to exert its intended function in the economy of the world, will be found, not only in the works to which art has been hitherto supposed restricted, but as it was once, in every object of household utility. For such a result schools of design were instituted, and to which many recent efforts have contributed.

It has often been said that people will hazard an opinion upon a painting, a statue, or a building, with confidence, which they would shrink from in any other question requiring the possession of peculiar attainments. But this is in a much greater degree the case in other branches of design, forming the subject of the works now before us, in which it is with some difficulty that the world recognizes the presence of art. Therefore it is of the utmost importance that correct views should be communicated by all those who attempt to direct these branches of art in the early stages of their renewed progress, lest, through well-intended but misconceived efforts, mistakes should arise which may prevent art becoming what is hoped for. It is true that correct principles of design, difficult of discovery as they are confessed to be in architecture, are still more difficult in the department of art called "ornamental and industrial." In architecture, for modern purposes the extent to which consistency of style, and observance of precedent should be carried, to the end that the result may gratify the mind, are points upon which it is far more easy to suggest queries than to find definite answers. But in articles of furniture, and in other branches of industrial art, the demand for novelty can scarcely be held otherwise than paramount, even when rules and principles may be clear, and possibly conflicting with it. In architecture, whilst the materials for the exercise of genius are of great extent in comparison with the opportunities of using them, and where combinations of forms previously known, and even familiar, can be made to assume all the beauty, and be worthy of all the praise of excellent works, when governed by the hand of genius,—in furniture, there is a public demand for something which is far nearer to be assimilated to change of fashion in dress. However much an artist may desire to influence the taste of his country, or his time, to a certain extent he must follow it; and in this way we deem that he has no choice but to minister to the passion for novelty, wherever it may exist. In elevations of buildings, though invention is far too little regarded, it is right to estimate that quality as merely one of the objects of the architectural designer, and which can better be dispensed with than outline, proportion, fitness, character, and expression, although governing the arrangement of known forms. Thus the history of design in furniture, presents us with a multitude of changes, and to properly allocate some of these in their chronological order, is occasionally a task, in which the cotemporaneous architectural style affords no suggestion.

Still, whether it becomes the artist to pay that deference to the wants of manufacturers which seems to be required, or whether the unceasing demand for novelty be allowable in a branch of art which has not the stability nor the dignity of that which belongs to buildings, it would be inconsistent to say that there may not be rules, by which the forms of articles of utility, or of decoration, may be governed. We believe, then, first, that whatever form will interfere with the actual purpose in an article of utility, will be unsatisfactory, as part of a work of art; and, also, that the purpose should be evident. The form of an article of furniture, or of any utensil, should be, both actually and obviously, that which is best fitted for the purpose it has to serve, and it may be said, that it is not till those requirements have been satisfied that art comes into consideration. As we happen to have said more than a year ago,—"The type in objects of useful and ornamental [conjoined], is less readily explained than in those of fine art, and may be considered to be rather an embodiment of the principle of utility. Consequently, the forms of those objects must always be such, as it is at once evident are best fitted for the main end. The forms of nature and the rules of art are rather the matters engrafted upon this principle, than *obvious* in the design. The useful end should be completely fulfilled, and without danger of misconception." "All mermaids which turn out to be taper-stands, flowers which are curtain-holders, and bunches of leaves which are jugs, candelabra, or hat-pegs, we take to originate from entirely erroneous views." We know that cups have been dug up at Pompeii, and elsewhere, which take the form of grotesque heads; and we know that a theory, the reverse of ours, which would make a flower serve the purpose of a candlestick, or disguise the actual use under some other form, is apparently sanctioned by the example of the ancients, and is much in vogue now. But, however beautiful the works which might be shown to us as models, and as arguments against us, they are beautiful only for what they represent, not for what they really are. The case presented to the designer for solution was this—to produce a cup, or whatever object might be intended, which would answer the usual purpose of a cup completely; and, secondly, to invest the form with those attributes of beauty, of which the object was susceptible. But, if one who wanted to drink were uncertain what utensil had the capacity he required, the design failed in one of the most important stipulations. The work might be beautiful as a design, but clearly, the solution of the case presented to the designer had not been approached. In this way, some of the designs for Felix Summerly's "Art-Manufactures" are

* 1. "Designs for Furniture and House Decoration, selected from the Works of the best German and French Ornamentalists. With an Introductory Essay on Ornamental Art. By W. B. Scott, of the Government School of Design, Newcastle." Illustrated by nearly 600 figures in lithography. Fullarton and Co., Edinburgh and London. Parts 1—6.

2. "The Practical Furnishing, Decorating, and Embellishing Assistant; consisting of Original Designs in the Grecian, Italian, Renaissance, Louis-Quatorze, Gothic, Tudor, and Elizabethan Styles of Cabinet and Upholstery Work, Stoves, Ironwork, Chimney-pieces, Glass, China, Clocks, Pianofortes, Silverwork, Chandeliers, Monuments, Epitaphs, Stained-glass, Marquetry, &c. &c. Interspersed with Designs executed for the Royal Palaces, and for some of the principal Mansions of the Nobility and Gentry and Club-houses." By Henry Whitaker. Fisher, Son and Co. Parts 1—11.

3. "The Practical Cabinetmaker and Upholsterer's Treasury of Designs; in the Grecian, Italian, Renaissance, Louis-Quatorze, Gothic, Tudor, and Elizabethan Styles, &c. &c." By Henry Whitaker. Fisher, Son and Co. Parts 4—13.

* Vide Vol. IV. p. 194.

mistakes, which are much to be regretted, considering that they are the result of an endeavour to extend the influence of art in the direction to which we have attached so much importance, and are many of them, beautiful. Our able contemporary, the *Athenæum*, adopting much the same line of argument as that we have quoted, says, in remarking upon these "art-manufactures,"—"A cabbage-leaf in crockery, though as cunningly wrinkled as the most perfect specimen in the Margravine Sybilla of Baden's collection, makes—tried by this principle—an ineligible vegetable dish." "Nor is the most exquisitely enamelled *calla* or *datura*, convolvulus bell or honeysuckle tube, in taste when to be employed as a bouquet-holder." As regards all such things —"there is a touch of the practical joke in the best of them;"—"while we have fancy we must also have probability." "The professed design is," "to make what is convenient also beautiful. In this scheme, then, the utility comes first—the art is subsidiary. If the convenience be lost sight of, the scheme is reversed—and though things very beautiful in themselves may be produced, it is in a new intention."

We have deemed it requisite to enter thus deeply into general questions affecting what—there is much ground for hoping—will become a popular branch of art, because the works before us are not the only channels by which its salutary influences and its mercantile value have been made matters for national consideration. Much dissatisfaction as there may be still reason to feel with the present state of schools of design, much good has even now arisen from these institutions, if only in attracting the attention of many individuals to departments of art, the existence of which, as far as the public were concerned, was forgotten. The work first upon our list is that which seems of most pretension, and might, if well executed, have proved of great service: it professes to be comprised of designs selected from the best French and German ornamentalists. Though most of the representations have the appearance of selections, we are not informed where the originals are to be met with. The work is altogether very far inferior to the well-known French works, of which it is apparently an imitation: generally the selections are by no means judicious, and the drawing what we have no toleration for, in a work of this nature. Mr. Scott's preliminary essay on ornamental art, which contains a sketch of the history of design, is, however, an exception to the general character of the work, and it is only right to say that this gentleman disclaims any participation in the illustration part.—The author of the other works on furniture, has been employed in designing for Osborne House, the Conservative Club, and at other places. His work, though consisting entirely of designs, displays considerable novelty, and has a practical character which will render it more useful to decorators than many books which they are now compelled to consult. Such works, moreover, have few merits of any kind to recommend them, and even some which have been very lately published are of comparatively little service, and several in which the designs are practicable, are entirely deficient in good taste. Of Mr. Whitaker's two works, the last on the list is confined to cabinet-maker's and upholsterer's work, and includes the designs for work of this kind, previously given in the more general collection. The author is evidently an accomplished draughtsman, and has introduced many natural objects with great taste, although in the endeavour to get beauty of design, even he is not free from the common mistake of designing what, if not impracticable, would be found inconvenient to keep clean, and liable to be broken. This is the case in a conch in the "renaissance" style, where the pendant fruit and tendrils would require a good carver to execute, and even under the hand of the most careful domestic, would hardly remain entire till the end of the first week. Projecting ornaments on the front, too, which are liable to be in the way of a person sitting, are objectionable, and in the present instance the unity of the design would be greater were the ornament in question omitted.—Window cornices should, if possible, give the idea of supporting and containing the curtains which hang from them: in the house dining-room at the Conservative Club this is well managed, but in the Baron de Goldsmid's ball-room the cornice is merely festoons of leaves, from which the vallance descends. The window cornice designed for Crewe Hall is called Elizabethan, but has all the outline of the Louis-Quatorze style.

In designing for furniture, to be adapted to old buildings, it is essential that there should be complete accordance of style between the building and all its accessories, but in new buildings, the extent to which good taste in design is assisted by observance of particular style, is a matter on which it is hazardous to give a hasty opinion. Mr. Whitaker has not been unsuccessful in any style, if we except the Gothic, in which he has shown us very few designs; and in comparing some of his "renaissance" designs with those which are called "Elizabethan," or with "Italian," we see how difficult it is for one individual to catch the peculiar characteristics of each, where shades of distinction are matters of nicety.

There is perhaps no article of furniture for which cabinet-makers have greater difficulty in procuring good designs, than for chairs; consequently, although plenty of designs have been published, those which can be executed have in most cases to be made in the "shop." Mr. Whitaker's designs appear, however, to be an exception, and the legs in several intances, evince really excellent taste.

In many of the designs, the author has perhaps fallen into the error to which all are so liable, viz., designing with an excess of decoration. This is objectionable, perhaps not so much on account of cost, as from the difficulty of obtaining real artist-workmen, a class which has yet to be created in England, and to whose institution we would gladly contribute.

Mr. Whitaker's works will, we think, do much to aid the efforts which are now making to improve the arts of design, and will no doubt prove acceptable to manufacturers, who are generally anxious to execute what is in good taste, but have hitherto lacked the means which the publication of a better class of books than has hitherto been in their hands, will afford them. When good principles of decorative art have become fixed, and artists properly imbued with them are numerous, we should rather urge, as in all parallel cases, that the artist be applied to in the first instance.

CONSTRUCTION OF WROUGHT-IRON BEAMS OR GIRDERS.

THE construction of iron girders, especially for bridges, occupies much attention at this moment: a Government Commission of Inquiry on the subject is now sitting, as our readers know,—experiments are going on in various quarters,—and improvements are suggested every day. Cast-iron is a valuable material; but where the span is large,—great weights are to pass,—and much vibration may be expected,—caution is required in its employment as a girder.

We have often urged on the attention of Government the importance of offering premiums, with a view to improvement in the *rolling of beams*. If this were done, there is little doubt that the cost of wrought-iron girders would speedily be lessened and their use be more general.

The difficulty of making cast and wrought-iron act in concert is great: by the way in which it has up to this time been effected, harm instead of good has been done. The Government engineers, appointed to report on the failure of the Dee-bridge, said:—"That the bridge was of sufficient strength, if the cast and wrought-iron be supposed to act together,—each taking its equal proportion of the strain.

That there is great difficulty in ensuring the joint-action; and that, if this is a part of the principle of the bridge, we do not approve of it.

That neither the wrought nor the cast-iron, taken separately, was sufficient for perfect stability; and that, to have ensured this, the cast-iron girders alone should have been of sufficient strength to carry the whole weight, with an ample allowance for various circumstances which we have explained."

The Commissioners of Railways, after considering the report, from which the above is extracted, thought it their duty "to call the attention of her Majesty's Government to the uncertainty which at present exists respecting the conditions to be complied with in employing iron, but more particularly cast-iron, in engineering works. Although the facts which have been collected, and the principles which are acknowledged, may have proved sufficient for the guidance of engineers in the application of iron to works which are not exposed to an action differing materially from the steady load, yet there appears to be great doubt whether the experimental data and the theoretical principles at present known are adequate to guide them in designing iron bridges, when these are to be traversed by loads of extraordinary weight with great velocities. When exposed to the rapid motion of railway trains the structure should be capable of sustaining, without permanent injury to any part, the concussions which any irregularity may occasion, and the vibratory action which a rapid alternating change of condition must produce. The commissioners have reason to believe that much difference of opinion exists among the most eminent engineers of the present day, as to the proper form and dimensions to be given to railway girders of iron, to resist the combined action of the several forces to which they are subject during the transit of trains; and until the subject has been further investigated, they cannot be considered as having sufficient data for their secure guidance."

The uselessness of tension-rods, as usually applied, has been conclusively shewn in our pages. We look with anxiety for the result of the girder-commissioners' inquiry.

In the meantime Mr. Fielder, in conjunction with Messrs. Baker, of Stangate, has taken out a twofold patent;—first, for the construction of girders entirely of wrought-iron; and, secondly, "of girders of wrought and cast-iron riveted together, by which means (says the inventor) their co-operation is secured in a manner which the systems heretofore adverted to have evidently failed to accomplish."

One that we saw consisted of top and bottom flanges (10 inches wide and 1 inch thick), of welded plates, and a rib, 2 ft. 8 in. high and eight-twelfths of an inch thick, of three pieces, secured and riveted at the heading joints. The flanges were secured by inch rivets to the rib, by means of an angle-iron on each side, $\frac{5}{8}$ths of an inch thick. This girder, with a bearing of 31 feet 4 inches, had been subjected, it was said, to a proof of 150 tons on the centre, without injury to the elasticity of the metal, the deflection being 1 inch. 180 tons were assumed to be the breaking weight, one-half of which, or 90 tons, the patentee considers might be taken as the *working* weight.

In respect of girders made of wrought and cast-iron together, the patentee states, that he riveted to the bottom flange of a girder which had been broken in the middle, a piece of wrought-iron 8 inches by $\frac{5}{8}$ths of an inch, and then proved it to 22$\frac{1}{4}$ tons without injury to its elasticity. The bearing was 20 feet; the height of the broken girder was 1 foot 8 inches. Another piece of wrought-iron, 8 inches by $\frac{5}{8}$ths of an inch, was then added in the centre only, about 3 feet long, and the girder was then proved to 52$\frac{1}{2}$ tons.

The next experiment was upon a cast-iron girder, the breaking weight of which, by Hodgkinson's rule, would be 20$\frac{1}{2}$ tons. "It was proved to 15 tons without loss of elasticity, and then as far as 18$\frac{1}{4}$, where a permanent set of 1-16th inch took place, the total deflexion having been 7-16ths bare. Here it is supposed that the metal was in some degree injured. A wrought-iron bottom flange, 6 by $\frac{5}{8}$, which, by the patentee's rule, would be 14.1-5th tons working power, was then attached to it, and the compound girder thus created was proved to 30 tons, with the same deflexion as took place before the wrought-iron addition, with a load of 18$\frac{1}{4}$ tons, but in this instance without injury to its elasticity."

We subjoin a few jottings on the subject of girders from various sources:—Captain Coddington's report on the bridges of the Trent Valley line has been before us for some time. From his description of those constructed with cast-iron girders we learn, that fifteen of these do not exceed 30 feet opening; four others vary between 35 feet and 37 feet 6 inches; every girder was proved at the foundry—the proof always extending to half the calculated breaking weight. The deflection on the largest of these girder bridges, with a tram of three of the heaviest engines coupled together, was

half-an-inch. Iron girder bridges exist on every railway in the kingdom; and he considers that up to a span between 35 and 40 feet, a flat cast-iron girder, of strength calculated to the usual formula, affords security as a railway bridge. With respect to the compound girders, similar to those over the Dee at Chester, there are six bridges, with girders in three castings, bolted together at the flanges, clipped underneath, and strengthened by massive wrought-iron rods, forming an inverted truss. There are two over the Trent and Mersey Canal—span, 54 feet 3 inches; one over the turnpike-road, 57 feet; one over the Coventry Canal, 60 feet; one over the Oxford Canal, 44 feet; and one over the River Tame, 70 feet span. The latter bridge has had a double row of piles driven in the bed of the river under each of the joining flanges of the girders; these piles are connected at the heads by cup sills, extending under the girders, and the interval between them and the girders is made good with wedges—thus dividing each span into three spans, and covered by a girder calculated equal to three times the span: he has no doubt, therefore, of the strength and efficiency of this bridge. The other five range between 50 and 60 feet; and assuming that these compound girders, including their tension rods, are only half more in strength than the calculated beam, they fully come up to the proportions hitherto considered safe by eminent engineers. In testing these girders, there was but a deflection of three-quarters of an inch on a span of 60 feet. He remarks,—"In the same manner that I consider experience to have proved the sufficiency of a simple girder up to 40 feet, I consider it has also proved the sufficiency of the compound girders up to 70 feet."——Mr. Gibbons, of Corbyn's Hall Iron-Works, has patented a new method of trussing cast-iron girders, in which the rigid trusses heretofore employed are abandoned, and elastic ones substituted. The *Mining Journal* attempts to describe it, by supposing a girder of considerable length, formed of three sections, bolted together, through flanges at the end of each, in the usual manner. Mr. Gibbons now introduces beneath the centre section a powerful spring, made exactly similar to the bearing springs of railway carriages, with the convex side abutting on the girder; and wrought-iron truss-rods are fastened to each end of this spring, and bolted up tight to flanges, cast at the extreme ends of the two outer sections of the girder. Where the girders are of considerable width, a number of springs may be used, ranged side by side; or smaller springs may be used, and placed two together, with their concave faces inwards, one under each joint of the sections of girder, and one in the centre, trussed up tight by suspension rods.

THE GOODWIN SANDS ONCE MORE!

'He will surely be mad who makes another attempt to raise a beacon-light on the Goodwin Sands,' was the ejaculation of a despairing cotemporary on the failure there of the late attempt to 'rule the waves,' and 'build upon the sand,'—two formidable and daring enough, if not foolhardy, projects, as, in an unqualified sense, they certainly would have been: but in truth the late attempt at the Goodwin Sands was not an attempt to do the one of these mighty deeds, by aid of the other, at all, but a bold and ingenious endeavour to rule the shifting sands themselves, by piercing them through and through, and nailing them down, as it were, to the solid rock below, even though at a depth of three-and-thirty feet beneath their shifting surface. Such was and is the hopeful scheme of which we, some weeks since, gave to the readers of The Builder our own ideas, along with particulars furnished by one who had carefully examined the details; and we are glad to perceive that our remarks have already been suggestive, and that a modification of Dr. Potts's attempt to pierce the sands to the bottom, in connection with other and engineering means of taking more or less full advantage of the anticipated success of such an attempt, on what may be called a great scale or compass, to pierce, by pneumatic tubes, to the bottom of these sands, has been already suggested, with the view of once more even daring, with us, to renew the 'mad' attempt to strip this too long celebrated terror to our seafaring fellow-men of all its horrors.

In the *Mining Journal* of Saturday last, Mr. George Shepherd, C.E., presents the details, with plans, of such a suggestion. He proposes "to construct a wrought-iron cylinder of say three-eighths-of-an-inch boiler-plate-iron, of 30 feet diameter, which would give a sufficient base for a lighthouse of 120 feet above high-water mark. Such a light would be seen at a suitable distance. The cylinder should be made into sections of 4 feet in length, and should be fitted up on shore with the greatest care. A stage could be made on piles, driven into the sand, and the whole well braced together. Having adjusted the preliminary arrangements, 16 feet of the cylinder could be put together, suspended between four lighters; and then, by the aid of a small steamer, could be towed into its intended position, and there lowered into the sands. Having fixed and secured the first portion of the cylinder to low-water mark, the remaining sections could be floated off in the same manner. The joints being previously prepared, each section could be screwed together, and sunk to the required depth, in a short time. In case it was found that the cylinder had not sunk to the required depth, I should resort to Dr. Potts's atmospheric pile-driving system, by which means the cylinder could be forced down to the required depth. The next plan of operation would be to drive the external piles [in a circle, surrounding the great central pile, tube, or cylinder], also by Dr. Potts's system, the whole well braced together. When the pile-driving is completed, the sand between the cylinder and the piles should be taken out as deep as possible, with the bag and spoon apparatus; and the space thus excavated should be immediately refilled with the best concrete, which would entirely protect the foundation against every storm. The cylinder being so far perfectly secured, a few ship pumps could be fixed inside to pump out the water; and, in order then to secure the cylinder against the external pressure, a [temporary] process of timbering should be resorted to.

After having pumped out the water, and well secured the cylinder against the external pressure, the sand inside the cylinder could be taken out, and the same process of timbering repeated every 5 feet, until the whole of the sand is excavated to the chalk formation. The sand being excavated, the concrete foundation for the lighthouse should be put in without delay. The concrete being set in one mass, the stone work could be commenced; and, as the stonework rises inside the cylinder, the timber could be taken out. The stonework should be of the strongest construction, and every block well bound together.

All works of this nature should be commenced in the early part of the spring. While the apparatus lies in readiness on shore, the cylinder could be quickly sunk into its position, and perfectly secured by piles and concrete in a few months. In case of storm, or bad weather, it would be only requisite to let the water into the cylinder, to counterbalance the external pressure of the waves, and which could be easily removed, when the storm had abated. This plan of effecting a firm foundation for lighthouses is not only applicable to the Goodwin Sands, but can be extended to all bars of rivers, and other places where a light is required to warn the mariner of danger."

Builders' Association at Liverpool.—In consequence of what has been conceived to be the needlessly arbitrary and costly regulations of the local sanitary bill, and the requirements of the council's committee of health, supported as they in general are by the magistrates even in cases where appeal, it is thought, would lead to a reversal of their decisions, an association has been established, according to a correspondent of the *Albion*, not with any adverse feeling towards those sanitary measures which must rather benefit the property of house proprietors and builders in general than the contrary, but simply for mutual protection against oppressive measures and decisions by a general defrayment of the costs of appeal, &c., in cases which affect the interests of the body at large and not of individuals merely.

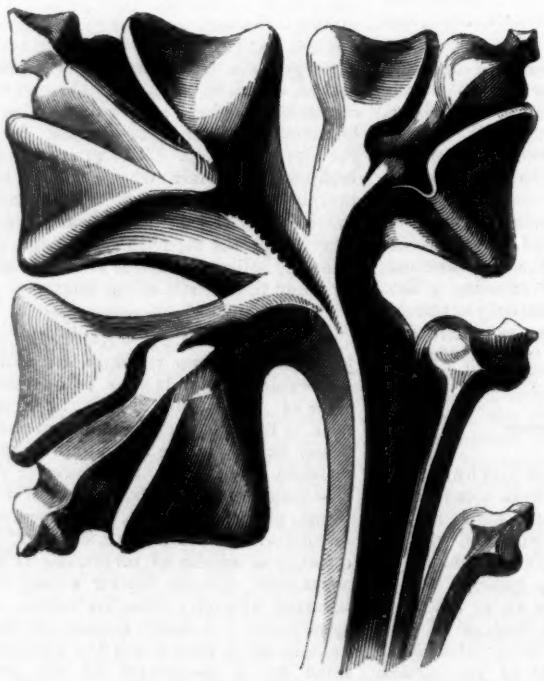
SOCIETY OF ARTS.

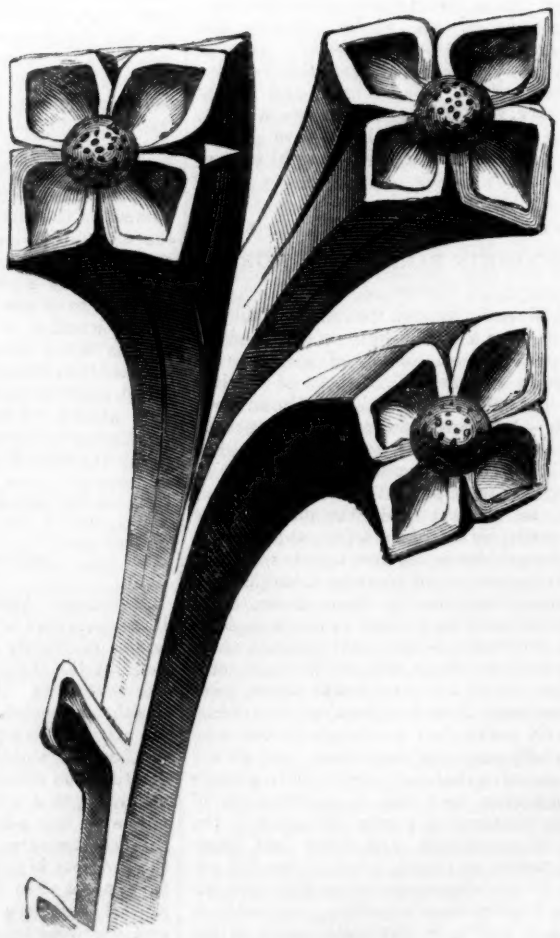
At a meeting on the 17th ult. a communication was read by Mr. Briant, "On his plan for overcoming the difficulties of a break of gauge, and of uniting the broad and narrow gauge railways." Mr. Briant commenced his paper by pointing out the difficulties which had arisen from the adoption of the two gauges in this country, and the objections which have been urged against the various plans, viz., the telescopic axles for the wheels, the shifting from the carriages of one gauge to that of another, laying down double lines of rails, &c. He then proceeded to describe his own plan, which is as follows:—At the point of junction of the two gauges a platform is to be fixed in the centre of the rails, the carriages are then to be placed upon wheels, the two ends of the axles of which are to be made as male screws; on the centre of the axle a pinion wheel is to be fixed, and under it, attached to the frame of the carriage, a lever, upon the upper side of which is a rack, and at the lower end an anti-friction roller. The naves of the wheels are to extend under the carriage in the form of a female screw, to receive the axles. By this arrangement, while the train is travelling on the narrow gauge the wheels would be screwed up to the required width, the racked lever hanging loosely under the pinion wheel, and the axle would turn with the wheels—but when the train reached the point of junction the lever would be caught up by the platform (which is to be forty yards long), and with it the rack. The axle would thus be prevented from turning, by the pinion wheel and rack; and the wheels, from the weight of carriage passengers, luggage, &c., pressing upon them, would immediately begin to unwind the screw, which, by the time the carriage has reached the other end of the platform, will have extended the axle to the required width: the lever would drop and free the pinion-wheel, and the axle would then turn with the wheels as before. The wheels are kept in their position when unwound by coupling rods: in backing the train the screw is prevented from acting by means of a stop fixed to the carriage, and blocking the axle. A working model was exhibited.—The second communication read was by Mr. D. J. Hoare, "On a railway telegraph and alarum to be used as a means of communicating between the guard and driver of railway carriages." The plan proposed is that a screw of rods should be passed through the carriages of a train and united at their extremities by a telescope-joint, so as to allow of extension and contraction. The rods being made with a universal joint, admit of a rotary motion—the only motion which a railway train has not. At the end of the rod, on the guard's carriage, is a crank, which, when the rod is turned, comes in contact with a hammer, and causes it to strike a bell. A signal is then to be raised, indicating the carriage from which the signal is made. The guard will then immediately ascertain whether it is necessary that the train should be stopped, (?) and if so, by turning the rod in the reverse direction to what the person signalling had done, will ring another bell at the driver's end of the train, or sound the whistle of the engine.

New Gas Engine.—An engine, on a new principle, has been invented by a Mr. Perry, of Herkiman, and is now in operation at the store of Mr. Samuel Perry, in Front-street, near Whitehall, and evinces an astonishing power in proportion to the minute quantity of material from which the power is produced. The machinery consists, in part, of a cylinder, piston, pitman, flywheel, and governor; in this respect similar to a steam engine. A small quantity of spirits of turpentine is kept in a warm state, and the vapour arising therefrom is mixed with fifty times its volume of atmospheric air. A small quantity of this hydrogenated air is drawn into the cylinder and ignited by a movement of the machinery, producing a slight explosion, whereby the remaining air—at least nine-tenths of the whole—becomes so heated that it drives forward the piston with great force by its expansion. This engine is said to be capable of working ten-horse power; and it is intended to substitute resin instead of turpentine, which will reduce the expense of feeding it to about 50 cents per day.—*New-York Journal.*

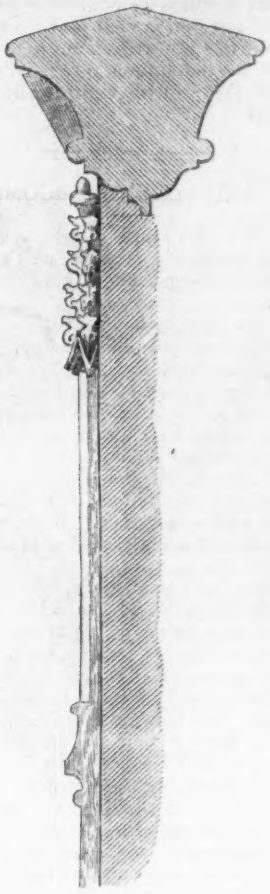
SCREEN IN ST. MARY'S, LEICESTER.

EXAMPLES OF CROCKETS.





SECTION OF THE UPPER PART OF SCREEN.



NORMAN DOORWAY, HARMONDSWORTH CHURCH.

ARCHITECTURAL DETAILS FROM LEICESTER.

The town of Leicester, interesting alike from its past associations and for the ancient wealth of its monastic institutions, still possesses very numerous remains, domestic and ecclesiastical, which are worthy the attention of both architect and antiquary. The Abbey, which history and Shakspeare have interwoven with the fall of Cardinal Wolsey, has been long celebrated and repeatedly described; and its ruins constitute a favourite artistic haunt, and are often the subject of the scientific pencil. But to the churches of Leicester justice has not been done; for, although their main features are familiar to the topographical reader, their details, which are in many cases of extreme interest and peculiarity, have been overlooked, even by the laborious Nichols. St. Mary's and St. Margaret's are the chief architectural glories of the town; and the former of these edifices (the once collegiate church of St. Mary de Castro) differs in many important characteristics from most of its contemporaries. Its union on one side with the prebendal houses, which originally formed part of its foundation, is not the least remarkable, nor is the circumstance that a chamber of some size, carved in timber, and intended for the use of the *Janitor Castri*, projects into the church, but at the same time is considered extra-parochial. This appears to have been executed at the rebuilding of the church, which took place shortly before 1400, and is attributed to John of Gaunt, whose connection with the town of Leicester is universally known; indeed, his influence and that of his lady were felt not only here, but throughout the neighbouring villages, and are frequently found memorialized in sculpture, and in fragments of stained glass.* At the period of this restoration, it was found that the ancient church, which owed its existence to Robert de Bellomont, in 1107, had become too small to keep pace with the increasing population of the district; and its alteration by additional breadth caused the introduction of some strange anomalies. A Norman church stood, as it were, within one of perpendicular character; till the massive walls, decorated with a profusion of zigzag mouldings, were pierced and otherwise contorted, to harmonize in some measure with the modern exterior. A large carved oak screen, consisting of a series of enriched compartments, all differing in their minute adornments, was now erected; and although it has been lying for years in a state of uselessness in an obscure corner of the nave, will probably now, in consequence of the spread of ecclesiological knowledge, be restored and replaced in its proper position. One of its compartments is here given to a small scale, and those which are best preserved of its abundantly various crockets, represented full size.

The advantage of the present example, as an authority to be studied by the decorative artist of our day, consists in the fact that it is one of a class of objects now for a second time becoming prevalent in our churches, and that although it is not, like many remains of a similar period, crowded with elaborate profusion, it exemplifies that diversity of detail which characterises all mediæval productions, but is too often neglected in modern restorations and designs. W. H. Rogers.

* The arms of Constance, daughter of Peter, king of Castile and Leon, and second wife of John of Gaunt, are elegantly depicted in one of the windows of St. Denis's Church, Evington, near Leicester.

NORMAN DOORWAY, FROM HARMONDSWORTH CHURCH.

About two miles south of West Drayton is situated the quiet little village of Harmondsworth, and, though possessing nothing very attractive to a casual tourist, the lover of antiquity may find, in a visit to the church, something to gratify, if not to instruct.

The building consists of a nave, with two aisles, a tower at the south-west angle, with a chancel and north chapel. The nave and aisles are of the Norman period, though much has been done to assimilate them with the chancel, which is perpendicular. There is a north and south doorway, the former of which is not at present used; and of the latter, which is inclosed in a wooden porch, I annex an illustration. The nave is separated from the aisles on the south side by semicircular arches, supported by massive Norman columns; and on the north side they have been altered into perpendicular. The north chapel is divided from the chancel by flat perpendicular arches and columns. There are no remains of a chancel arch, and where the perpendicular arches of the chancel intersect with those of the nave, which is at the centre of the arch, a very odd appearance is produced. There is a priest's doorway on the south side. The windows all accord with the date of the chancel, except the west, which is devoid of tracery. They are in a very decayed state, and require restoration. In the church is a Norman font, of marble, quite plain, of octagonal form, and recently reworked. There are also some few good perpendicular benches,—otherwise the church is filled with unsightly square pews.

The tower is of perpendicular date, and has an embattled parapet.

Within a short distance is a barn, known by the name of "The Long Barn," from its great length, which has a fine old timber roof; but, when we visited it, it was so piled with corn that it was scarcely visible—a disappointment which was more than compensated by the feelings induced by this evidence of the late abundant harvest. C. Innes.

AWARDS OF OFFICIAL REFEREES.

VERANDAHS.

Mr. De Wilde, a blind-maker, having formed a projection in the front of 39, Eaton-square, the whole length of the front, to which the district surveyor of St. George's Hanover-square objected, as not being built of proper fire-proof materials, the matter went before the referees. Mr. De Wilde contended, that the erection was a blind, an article of furniture, and no part or parcel of the building, and therefore that it did not come under the operations of the Buildings Act. He observed, that it was composed of light iron uprights, with a metal roofing, wholly uninflammable; the blinds and facia (13 in. deep), he admitted, were of wood, but contended the facia is a necessary portion of the blinds, and permitted by the special award or certificate, No. 3,488, made the 3rd of May, 1845, and transmitted from the office of Metropolitan Buildings the 7th of May.

The referees determined "that the projection in question is a projection from an external wall, not forming part thereof, of the nature of a verandah, and in so far as it is not composed of brick, tile, stone, artificial stone, slate, cement, or metal, or other proper and sufficient fire-proof materials, such projection is contrary to the Metropolitan Buildings Act; but that if the same be made conformable thereto by the removal of the wooden plates and facias, and other woodwork, it will not be contrary to the Metropolitan Buildings Act to place Venetian or other blinds in the front, nor upon the sides of the said projection; if such blinds be kept within and clear of the line of the inside faces of the party-walls."

ARCHITECTURAL WORKS IN EDINBURGH.

We take the following from the *Companion to the Almanac* for next year. We shall refer hereafter to its contents generally, which are of a very interesting kind: *—

"To the slight notice, in our volume for 1846, respecting the Commercial Bank, and one or two other structures then in progress at Edinburgh, we can now add some further particulars, and have to correct an error into which we were led as to the façade of the Bank. Instead of the portico being a hexastyle *in antis*, from which description it would naturally be inferred that it was closed at its ends and recessed within the building, it is a simple hexastyle, monoprostyle (*i. e.* projects one intercolumn before the general line of the front, which is extended by an intercolumn between coupled antæ on either side of the portico); therefore, although the entire front consists of seven intercolumns, the portico itself, and the part within it, have only *five*. If that feature be considered by itself alone—as is unfortunately too generally the custom in all cases of the kind—it may be pronounced both classical and ornate, for not only are the columns fluted, but the pediment filled with figures in very high relief, representing Peace, attended by Abundance, Navigation, Commerce, and other allegorical personages. This piece of sculpture is the work of Mr. A. H. Ritchie, a native artist, and it is only to be regretted, that owing to the untowardness of the aspect (north) both that and the portico lose much of their effect. Even were the aspect ever so favourable, the portico would still show itself too much as a mere architectural appendage of studiedly templelike character attached to a structure decidedly *anti-antique*, its physiognomy being strongly marked by fenestration and other traits of modernism and Italianism. Not only are there two tiers of windows (which are continued within the portico), but the upper ones have arched heads, and balustrades below. Instead, too, of having a Greek podium or parapet, the building itself is crowned by a balustrade. Thus two distinct and hardly reconcileable systems are brought into contact, and even collision, with each other; therefore, either the portico should have been accommodated to the building, or the building to the portico; for at present the pure classicality affected for the latter is contradicted by all the rest. The ascent to the portico, however, and the extension of the lower part of the composition by balustrades carried from the pedestals that flank the flight of steps, to two insulated doorways or portals with open ironwork gates, produce considerable effect of a rather unusually picturesque kind. The interior is more satisfactory; one of its principal parts is a handsome inner hall, carried up the entire height of the building, and surrounded by an Ionic colonnade below, and a Corinthian one above. It is lighted entirely from above by a lantern, and has a staircase on two of its sides. The principal banking office, to which this hall conducts, is, for a room of business, the most highly decorated apartment of the kind in the kingdom: it is a spacious apartment, square in plan, with a Corinthian colonnade of three intercolumns on each side, and is surmounted by a dome whose section is of elliptical form, and richly ribbed and panelled, through which the light is admitted from ornamentally glazed compartments. The architectural effect of this saloon, as it may fairly be called, is enhanced very considerably by the abundant employment of decorative painting, gilding, and marbling, executed, we believe, by Mr. Hay, of Edinburgh, who embellished the great room of the Society of Arts in the Adelphi.

Donaldson Hospital has, we are glad to say, proved an equally worthy and important feature in the architecture of Edinburgh, being a fine and imposing mass of building, in what we could before only vaguely characterize as the Elizabethan style, but can now describe as partaking largely of that particular mode of it exhibited in Burleigh House, and in which ogive-domed turrets, and towers, and chimneys contribute so greatly to picturesqueness of outline. The edifice is completely insulated and apart from other buildings; and at each of its four angles is a square pavilion, with a projecting three-storied bay on each of its two outer sides, and four domed turrets of the kind just mentioned rising up from it. The centre of the south or principal front is marked by a larger and loftier pavilion of similar composition, but with octagonal turrets, and domes more ornamented than the others. The general mass of building or parts between the pavilions, has only two series of large square-headed mullioned windows, and a parapet broken into a series of small gables with chimney shafts rising out of them.

The new Debtors' Jail, of which, we understand, Mr. Rhind is the architect, is in what may be called the castellated Norman style, and presents in its general composition an upright group of variously-shaped towers, rising above the external wall of enclosure, and so disposed as to produce much picturesque effect of outline from different points of view. We may also mention the chapel of St. Columba, lately erected by Mr. Henderson, in the vicinity of the castle, as being, though a small and unobtrusive structure, a far better specimen of Gothic than other attempts in that style at Edinburgh, most of which are exceedingly unsatisfactory, the Scott monument being not the least so. Some time ago it was rumoured that a Roman Catholic church and college were to be erected in the Lothian-road, after designs by Mr. Pugin, but, if it really existed, such intention seems to be now dropped. Edinburgh is now about to be greatly benefited, and in some degree architecturally improved also—at least to acquire several new architectural features—by the erection of several terminuses and other railway buildings, some of which are now in progress. Little more than a year ago the railroad from Glasgow to Edinburgh was the only line of importance which communicated with the latter city; and its terminus, at the western outskirts of the New Town, presents little more to the eye than what is suggested by utility alone. Since then, however, the opening of the North British line to Berwick, and the completion of the railroad between Berwick and Newcastle, in continuation of the eastern route from London, have given importance to Edinburgh as a focus of communication, and have led to schemes of considerable magnitude, if not of extraordinarily high architectural pretension. The Glasgow line having been lately extended eastward, to meet the North British, a joint-terminus, unrivalled for convenience of situation, has been formed for those lines, and also for the short railroad to Leith and Granton, in the hollow between the Old and New Towns, formerly called the North Loch; the buildings for which extend from the North Bridge on the east, towards the mound on the west. Lying in a low situation, as this joint-terminus does, and where any spreading and lofty pile of building would interrupt the picturesque view between the Old and New Towns, its architectural masses are very judiciously kept down, nor has any more decoration been bestowed upon them than serves to produce a requisite degree of finish. The great rival to the eastern line of communication is the Caledonian Railway, which approaches Edinburgh on the west, from Carlisle, having a line also diverging at Lanark to Glasgow, and completing the communication with London by means of the Lancaster and Carlisle, and the North-Western railways. Of the Caledonian line, however, a length of forty miles north of Carlisle is all that has been yet opened, though the remainder is in such forwardness that the entire line to Edinburgh is expected to be finished by the end of the present year (1847). Its terminus will be in the Lothian-road, at a point due west from the castle; a locality of no architectural interest at present, but which may be expected to acquire much from the extensive works and improvements now commenced. The buildings will form a parallelogram of about 400 by 200 feet. The south or entrance front, which is on one of the longer sides, presents a façade with a handsome colonnade of the Ionic order, behind which rises an elevated central pile, containing the directors' rooms. The east or Lothian-road front exhibits an open screen of three large arcades, whose piers have coupled Ionic columns attached to them, which connects the two wings or extremities of the composition. The design is by Mr. Tite, the architect of the Royal Exchange, London, and architect for the stations and other buildings on the Caledonian, Lancaster and Carlisle, and Scottish Central lines of railway. The joint station of the two first-mentioned lines at Carlisle is, we may observe, now nearly completed; it is a Gothic pile of considerable pretension, and fully equal in extent to that just above mentioned, and of which we hope to be able to give a detailed description next year. In the same style as the one at Carlisle, but of greater extent, will be the station now just begun at Perth for the Scottish Central and Midland Companies."

* "The British Almanac for 1848, and the Companion to the Almanac, or Year-Book of General Information." London, C. Knight.

VENTILATION OF ROOMS.

Sir,—We have heard of late a great deal about the health of towns, as well as the ventilation of buildings, but as yet little has been effected.

Now, as the better ventilation of every apartment in every dwelling-house, especially those appropriated as sleeping apartments, would be highly conducive to health and comfort, permit me to describe a simple means by which this may be effected, at little expense, in every apartment of our dwellings, and also in shops, schools, hospitals, factories, churches, and other public buildings, as well as in those buildings also appropriated to animals of various kinds, and equally applicable in old as in new buildings.

A farmer, on a small scale, who had made a cellar his dairy, found the milk and butter would not keep sweet, owing to some offensive smell in the cellar, of which, for a long time, he in vain endeavoured to find the cause. The farmer then turned his mind to making a vent, or escape, for this offensive air, to effect which he made a hole in the ceiling large enough to receive a funnel, the large end or mouth of which he turned downwards and well plastered to the ceiling, so that air could escape only through the funnel; to the other end he attached a long small tube, which he conveyed along a joist above the ceiling, and out through the main wall of the building. To the great joy of the farmer, the cellar or dairy was thus rendered perfectly free from smell, and the butter and milk would keep sweet. Curiosity, however, induced the farmer to mount a ladder, and apply his nose to the small tube outside the building, when he found issue from it an excessively offensive stench.

A neighbour of the farmer, to whom had been related the above case, on visiting the County Asylum soon after, perceived an offensive odour in one of the wards, for which the matron found a plausible excuse; but the gentleman desired to be conducted to the water-closet of the ward, as he was sure the offence originated there, and this proved to be the case; but the remedy was not so obvious, until the farmer's statement occurred to his mind; he then immediately sent for workmen, and applied the farmer's remedy in the water-closet, which was in this case also equally effective.

We know that where three or four servants sleep in the same chamber, whether in a farmhouse or otherwise, that chamber is unfit to be entered the following morning—the atmosphere of it is so offensive, whether there be a chimney-place in it or not. Now, if an inverted funnel, say six inches diameter, were introduced through the ceiling, with a long small tube, say one inch diameter, and conducted along the joist above and through an outer wall, the foul air would escape, the chamber be freed from offensive smell, and consequently be more wholesome for the inmates. The same will apply to shops, school-rooms, work-shops, work-rooms, &c.

To drive a hole through the ceiling to the open space above would not so well answer the purpose, because the cold air would often rush down, and then the aperture would be certainly stopped up; or there might be two currents—one of warm air upwards, the other of cold air downwards—all of which the inverted funnel and tube would prevent.

To conduct the tube horizontally, and out at a side wall, will be found more effective than to carry it up perpendicularly through the roof, which, besides, cannot be done except in an upper chamber; and there can scarcely be a doubt that the atmosphere of all our rooms—eating-rooms, sleeping-rooms, and sitting-rooms, as well in cottages and farmhouses as in the dwellings of the middle and upper classes—would be improved by such

means. Nor let any suppose that opening a window—either the upper part or the lower—will be all-sufficient; for, to go no further, we may be quite sure so soon as the cold air were felt the window would be closed: besides, our dining-rooms are shut up, and our sleeping-rooms would not be open all night, except in few cases.

The inverted funnel might be rendered more or less ornamental in the centre of the ceiling, and never unsightly; our public buildings, also, as our places of worship, might be thus ventilated, in lieu of having a large aperture to the loft above, through which so much cold air often rushes as renders it necessary to be closed.

Our stables, cow-houses, feeding-stalls, &c., might be thus rendered more healthy, so necessary in this time of prevailing disease, without danger from a current of cold air. This, together with frequent white-washing with *hot* lime-wash to all parts of the building, would greatly tend to diminish the evil.

The funnel and long tube, made either of zinc or tin, will of course be varied in number and dimensions according to the ventilation required; and it must be remembered that the warm air, ascending in shape of steam or vapour, will, on meeting cold air, be condensed, and fall within the tube in form of water; therefore the long tube must be slightly inclined downwards, to allow the moisture to run outwards, instead of returning inwards or remaining in the tube, the end of which should project an inch beyond the wall of the building; and also the several lengths of the tube must so enter each other as to facilitate the outward current. A.

CHURCH BUILDING.

On the 20th ultimo the corner-stone of a small church was laid at Dringhouses, in the parish of Holy Trinity, York, which will have the peculiarity of being erected at the expense of one individual, Mrs. E. Trafford Leigh, to the memory of her husband. A plate was placed in a hollow formed in the stone, thus inscribed:—

"In the family vault at Lymn, in the County of Chester,
Lie the remains of
EDWARD TRAFFORD LEIGH, Clerk, M.A.,
For eighteen years Rector of Cheadle, in the same County.
He Died on the 7th day of January, 1847, aged 45.
To the Glory of God, and to the Memory of His Servant,
This Church of St. Edward the Confessor is
Dedicated. November 20th, 1847."

The building will consist of a nave 55 feet long, and 25 feet 6 inches wide; with a porch to the north; a chancel, 27 feet long, by 18 feet 6 inches wide; and a sacristy to the south of the latter. The west gable will be crowned by a bell cot, with spiral termination, partly supported by a buttress against the centre of the west end. The style adopted in the design is early decorated: it will be executed in a lime-stone from Clifford. The roof will be open, of high pitch; and the seats, for 200 persons, will be of oak. Messrs. Vickers and Hugall are the architects.

At Pendleton, Lancashire, All Saints' Chapel was opened for service last week, erected like the last by a lady, Mrs. Blegborough, daughter of Mr. Aspinall, of Standen Hall; and if we understand the *Blackburn Standard* rightly, it was also designed by the lady.

From the description, it is similar in arrangement to the last. It is in the decorated style, and consists of a nave without aisles, and a chancel, the whole covered in with a roof of equilateral pitch. The western gable is surmounted by an octagonal bell turret, terminating in a spire of moderate height, and the two eastern gables by stone crosses. The principal entrance is on the north side of the nave, approached by a stone porch; and on the south side of the chancel is the vestry, of corresponding character. The whole is built of hard white freestone from Waddington Fell and Pendle, which, in the mouldings and dressings, bears a sharp finish, the ashlar work being rough-dressed. The roof is of Baltic timber stained of a dark oak colour, open to the top, and showing the rafters; the principals springing from moulded stone corbels, uninterrupted either by tie-beams or other cross timbers, except at the top, where a quatrefoiled brace strengthens the whole. The windows, which are of various designs, are all glazed by Powell, of London, in quarries of various patterns, the east and west windows being enriched with borders and heads; in the former are the symbolic representations of the four evangelists, and in the latter the words faith, hope, charity, on scrolls. The chancel is raised above the nave, and ascends gradually by three broad steps laid with encaustic tiles, each step of a different pattern, while the nave is floored with quarrels of Wortshorn stone. All the woodwork is dark Dantzic oak. The benches or seats, which are open, are ranged on each side of a centre aisle, and the upright ends terminate in poppy heads. The lectern or reading-desk, which is on the north side of the chancel arch, is also open, and the poppy heads and panels are of carved work. On the south side is an octagonal pulpit, also handsomely carved and moulded. The chapel is calculated to hold about 180 persons. The foundation-stone was laid in May, 1846, and the building was opened on Thursday, November 11th. The contractor was Mr. Thomas Chaffers, of Burnley. The stone-work is by Messrs. Hargreaves, of Clitheroe; the carving and woodwork by Messrs. Squires and Veevers, of Clitheroe.

PROPOSED TOWN HALL AND MARKETS AT YEOVIL.

Sir,—I have just received my weekly number of your very valuable publication, and almost the first thing I saw was, that "the plans and estimate of Mr. Davis, of Frome, for the erection of the new Town Hall and Markets at Yeovil, have been adopted," &c. &c. If it is not contrary to rule, I shall esteem it a favour to have the name of your correspondent, because I think it is due to the profession and the public, that such men as Mr. Davis should be held up to public censure. The same advertisement has appeared in most of the local papers of this neighbourhood, even on the week following the regular announcement of the contracts and the names of the contractors. I am sorry to say this person is one of those who not unfrequently endeavour to prejudice committees and individuals against their architect, that his own name may appear in the public journals, as in the present case; and should it be ascertained that he is in any way the author of this advertisement, several gentlemen of eminence and considerable practice in the profession are quite prepared, with myself, to give him all the publicity he deserves. You will be doing myself and the public service by giving the most decided contradiction to the statement in this week's number of The Builder, as the individual in question has *nothing whatever* to do with the matter. He was the successful competitor for the building contract, but, not complying with the requisitions of the commissioners, the building was again left open, and *is at present uncontracted for*. During his interview with the commissioners he did propose, with his accustomed liberality, that he should be employed to superintend the works—I suppose, as compensation for his trouble, and receive the whole or part of the architect's commission, and probably, in expectation of the result, was premature in his advertisement. He neither knows, or makes any pretension whatever to, the study or practice of an architect, and is only a mechanic who has risen to be a master.—I am, Sir, &c.

Yeovil, Nov. 30. Thomas Stent.

Copy of Resolution, April 14, 1847.

Resolved,—That the second report of the Plan Committee be adopted, and that the first premium be awarded to Mr. Stent.

THE FREE EXHIBITION OF MODERN ART.

Sir,—The gloom which now overspreads the commercial world will no doubt be severely felt by artists, and cause many works of merit to remain unpurchased on their hands; and those who are accustomed to visit the painting rooms will see much to regret in the present lamentable crisis. But, thanks to the beautiful allegory of Pandora's box, Hope was retained,—Hope still remains to console and cheer us on. To a man possessing a truly artistic mind, the first great gratification, the sweetest reward for his labours, is reputation. However humble may be his style of living, with a public name he feels that he shall not pass to his grave and leave "no sign." Now, although the present prospect, in a pecuniary point of view, is not by any means promising, yet it must be a source of comfort to know that active measures are now on foot to provide for the many artists of merit of the present day,—an opportunity of fairly bringing before the public their talents in a manner hitherto unattainable, instead of being condemned to be thrust into dark holes or hoisted up to the ceiling.

I hear great talk about the New Association of Artists,—the free exhibition of modern art,—that they have taken the fine gallery occupied by the late Chinese Exhibition,—that they have already a hundred members,—and that those artists who wish to join them must make early applications for space, as the daily demand will in a short time leave none to be disposed of. This is really gratifying, to find that artists have at length done for themselves that which for years has stared them in the face as being the one thing needful,—to provide a place where they may *stand* or fall fairly by their own act,—by their merits or demerits. No one but he who sees the progress of a work on the easel can imagine the amount of cruelty, the laceration of feeling, the blighting of hope, experienced by an artist who finds his labours for months, perhaps years, all thrown to the wind in a moment, by having a highly-finished work thrust out of sight, or in some dark corner where it is never seen. Here at one blow he is partially destroyed in mind and pocket; no help remained for him; he dared not complain; submission in quiet was his only course.

I have a sufficient remembrance of the size of the gallery, while the late Chinese Exhibition occupied it, to conclude that the room will afford a grand opportunity for an exhibition of the free and liberal character I have mentioned; and I look to it as the great panacea for the complaints of artists. I also am informed that the committee intend to build, whenever a sufficient demand for increased space may be made; and that a fund is to be raised to relieve the exhibitors, their wives or orphans, should they fall into adversity. This is indeed a proper mode of disposing of the funds which may in time arise.

I doubt not that you will agree with me that the removal of the gimcrack Chinese entrance to the gallery is a judicious one. The novelty of it had worn off; and however proper for the occasion which placed it there, it would be a better ornament in some gentleman's garden than as an entrance-porch to a gallery of modern art.—I am, Sir, &c.,

Peter Palette.

FIRE-PROOF SAFES.

An obliging correspondent writes as follows:—

Property to an immense amount in title-deeds, foreign securities, &c., is now incapable of insurance from fire, on account of the excessive risk such articles are exposed to. A receptacle for articles of this nature has been devised which would afford for them perfect security from conflagration, and which might be constructed at an expense so moderate as might enable private persons to adopt it,—bankers, for instance, who usually hold in trust securities of very considerable value. It has been planned from a combination of the several expedients devised, and successfully introduced, by the late Sir S. Bentham, whilst Inspector-General of Naval Works, for the protection of the royal dockyards from fire, for the conservation of gunpowder in case of fire on board ship,—and for giving light to ships' powder magazines.

The proposed receptacle may be briefly described as follows:—

Where it can be constructed underground,—a chamber, of which the walls, floor, and roof, should be made perfectly water-tight, a cistern of water covering the roof.

The interior of the chamber either to be fitted up with a number of cells of metal, capable of being closed water-tight, or with separate moveable water-tight cases,—the cells or cases being for the reception of the property to be secured against fire,—these cells or cases being arranged in the middle of the receptacle, so as to leave a clear space between them, the walls, and the roof.

Pipes, communicating with the interior of

the receptacle, to be conveyed from the cistern, by which means, in case of danger from fire, water to be let into the receptacle itself, so as to fill it completely round and above the water-tight cells or cases. The cistern to contain a quantity of water more than sufficient to fill the interior of the receptacle; and means to be provided for replenishing the cistern in case of evaporation or other loss of water.

To render the flow of water into the receptacle self-acting in case of fire, the pipes of communication to be plugged with fusible metal: thus, should a neighbouring conflagration be such as to raise the water in the cistern to a boiling heat, the plugs would melt, consequently water would enter from the cistern to the receptacle, fill it, and preserve intact the contents of the cells and cases. After the danger ceased, the water would of course be pumped out of the receptacle.

The entrance would be most securely made through the roof and cistern above, by means of a cased trap-door closing water-tight, so as when not in use to be covered with water.

For giving light when needful to the interior of the receptacle, safety-lamps, encompassed by a double casing of glass, filled between with water; the pipes for supplying air, and for conveying away the foul air, to be siphon-shaped, so contrived that no sparks could issue from them.

Where such a receptacle could not conveniently be constructed under ground, the wall to be enclosed in an interior one at some distance from it; the interval to form a cistern filled with water, easily replenished like the cistern on the roof.

To dry and ventilate the receptacle, a ventilator, such, for instance, as that proposed by Dr. Hales a century ago, might be used; that is, a kind of wooden air-pump of very simple construction; means, at the same time, being provided to supply the place of moist air extracted by other air drawn from a chamber where it would be already dried and warmed.

As gunpowder, whether in bulk or in cartridges, was found to keep perfectly in Sir Samuel's water-tight cases, there can be no doubt but that parchments or papers might be equally well preserved in a suitable cell or case, supposing always that they were dry when inserted.

THE SUN CORRECTED!

The authorities of the General Post-office, it appears, have recommended, and the various railway companies have agreed to, the uniform and literal adoption of *Greenwich time*, at the railway stations throughout the whole country; and it is even anticipated, that "should this uniformity of time become general on the railways in England, as will doubtless be the case, it must quickly be adopted by the nation," which adoption "will, of course, involve the necessity of a corresponding alteration of the public and other clocks," especially of those which are *not* regulated by the London Post-office authorities, as by the new sun of a new horological system, but merely by the old sun, which is thus about to be discarded for the brighter luminary of St. Martin's-le-Grand. In short, it really appears that we were wrong in lately giving the same announcement the credit of an interpretation certainly more correct in principle at least, by taking it for granted that what was really meant to be done was simply to *regulate the true local time* by the observations daily taken at Greenwich, instead of other local meridians. But we now find that it has been determined, chiefly for the sake of some more obvious or supposed convenience to the Post-office authorities in regulating the despatch and arrival of the mails, and in spite of much of an as yet somewhat less obvious but not the less real *in*convenience, as well as error, and confusion,—to give the sun the lie direct, by declaring, and leading the nation at large to declare, that it is 12 o'clock noon at Holyhead, for instance, when the fact is that the sun has some twenty minutes' time to make up, or nearly so, before he reaches the meridian (or true 12 noon) at Holyhead. This go-a-head principle, in fact, is one that involves and affirmatives the celebrated proposition, that 'white is black and black is white;' for if the time at which the sun reaches the meridian at Greenwich be fixed upon and declared to be the very time at which he reaches any other meridian of longitude within the three kingdoms, a false principle is established that virtually and essentially declares it to be high noon where the sun is either only rising or where he is already going down!—a principle which, however obvious some of its conveniences may appear to be, is radically wrong, and therefore ought at least to be first of all well considered by astronomers and others competent, in all its bearings and its consequences, if not also to form a subject of previous international railway arrangement.

We should like to know what astronomical observers at Liverpool, or any where else than Greenwich, will say to its being nationally declared, by the local practice in the general regulation of clocks and watches in the respective localities, that it is there twelve o'clock noon ere the sun has risen to his meridian, or that it is not noon till after he has gone down from that meridian; or that at the equinoxes it is twenty minutes, half an hour, or a whole hour, or in short any definite time within twenty-four hours' past, or short of, six, at the moment when the sun either rises or sets, any where else than at Greenwich,— or rather St. Martin's-le-Grand it *should* have been.

If astronomers countenance at all so heterodox a *correction* of the sun's divisions of time into day and night and noon and morning, we mistake much if they would not rather at least recommend some local *centre* in the very *midst* of the empire thus induced to fix and stereotype, or, as it were, electrotype, by telegraph, a scientific error into one perpetual and conscious lie, or legion of diurnal lies, in the very face of the Sun himself: and such a mean or average centre could be easily found and as readily established, with a national observatory, and an electro-magnetic *rapport* with the telegraphic system, such as that already suggested in connection with the Greenwich noonday signal.

The questions at law which may originate in any attempt to derange the *only true time*, or true order of nature, in questions of time such as those connected with the starting of trains, the stoppage of banking or other branch establishments in different towns, &c., will be rather curious and interesting. But it is not our province here to enlarge on such topics. And moreover, although utterly false and indefensible in principle, really the electric telegraph is now so almost literally turning the world upside down, that the sun is getting quite into disgrace already as a notorious laggard, whose *ipse dixit* it is no wonder that St. Martin's-le-Grand at length despises and repudiates. A great demonstration of the capabilities of the telegraph, so far as now completed, took place on Tuesday week, on the recital of the Queen's speech by commission in the House of Lords. What may be called the national opening of the electro-telegraphic system was then accomplished, free to the public, by the Electro-Telegraphic Company. The speech was spoken in Parliament at one o'clock, and its electrical flash, in the broad sheets of the press, astonished and dazzled the eyes of the Edinburghers at half-past five!

Why even by the now more slow and cumbrous transit of the news by rail, the speech, together with a share of the debates of Tuesday, in the Wednesday morning papers, were in the hands of the Glasgow people, at a distance of 400 miles, by 8 P.M.—post horses from Beatock, 60 miles, notwithstanding. When we consider indeed, that even the 'cool hundred' miles an hour, as we have once already hinted, has been realized by rail, our patience with the very moderately rapid flight of time meted out to us by his highness the Sun, may well be now exhausted by ambitious doings such as those of the electric telegraph; for in the latitude of London, midday passes westward only at the rate of less than five and a half times more, the sun here travelling westward (or the earth's rotation eastward) only at the rate of 644 miles an hour; so that in not very much more northern latitudes it would actually be no very difficult task for a railway express to gain time upon the sun in travelling westward, or at least to fly before the darkness and escape being ever later at *any* station on such a line than 12 o'clock at noon of one and the same eternal day, as it rose to noon on each such station of such a railway 'girdle round the earth',— thus more, in fact, than realizing the horological paradox of St. Martin's-le-Grand! Though somewhat irrelevant in our columns, such reflections cannot but afford a just and striking idea of the comparative merits of the engineering and other means whereby "knowledge runs to and fro" over the face of the earth in the nineteenth century. These means must indeed be wonderful when they can so far sustain a comparison such as this, even relatively or ostensibly, with the tremendous rotary movement of the globe itself in our own intermediate and average parallel of latitude.

We may here observe that the Government bill to extend the time for the completion of railway works already begun, and to give directors a discretion in commencing new works, &c., has been read a first and second time, and ordered to be committed on Friday, the 3rd instant. The Chancellor of the Exchequer, in introducing the bill, disclaimed the idea that the money actually expended on railways had *occasioned* the recent difficulties, though he classed 'the railway mania' amongst the causes which led to these difficulties.

NOTES IN THE PROVINCES.

The credence tables in Silksteade's Chapel, Winchester Cathedral, have been stripped, by the archæological 'solution,' of the old Puritan whitewash with which they were defiled, and a group of painted figures has been disclosed by Mr. F. Baigent, one of the members of the British Archæological Association. Though mutilated in some respects, three of a series of figures which appear to have been arranged in groups, under eight canopies, still exhibit a pretty fresh and entire subject, namely, "Christ and Peter on the Sea."——It is proposed to erect a memorial window in the parish church of Great Yarmouth, to be called the 'Martin Window,' in commemoration of an industrious and philanthropic needlewoman, whose labours amongst the reprobate in Yarmouth jail, from 1819 to 1843, appear to be gratefully remembered by the inhabitants of the town.——Great progress has been made during the last three years in the decoration of the Manchester parish church, and the enlargement of its accommodation. Amongst other decorations, the *Manchester Advertizer* describes the roof, which is of low pitch, as supported by seven four-centered beams, dividing it into six bays, which are again subdivided into thirty-two squares by longitudinal and transverse mouldings, at the intersections of which are carved wooden bosses 'of exquisite and wonderful workmanship,' no two of which are alike, though the unity of the whole roof is preserved. The wood-work of each bay, in fact, was a separate gift. All these bosses, says our authority, are now illuminated. The law of formation in the colouring is observed to be, all depths of blue; those not so far removed, red; the more prominent features, gold. The same law appears to hold throughout the roof, the panels being blue; the bordering fillet white; the succeeding cove red; and the mouldings below, whose section would show a trefoil, have the lowest white, and the others gold. The only deviation is in the principal beams, in each of which two members have been boldly treated in emerald green, and serve to relieve the eye after the blaze of the bosses. The principal beams show on each side five shields. On these shields are emblazoned the arms of the deans since the first foundation of the college. The glass in the west window of the south aisle was gathered there as the sole fragments of the acres of stained glass which once adorned this church.——Some improvements have recently been made in the Doncaster parish church, particularly where the chancel leads to the nave, hitherto encumbered with high doors and benches, which have been cleared away.——The local authorities at Gateshead are using commendable diligence in the purification of the borough. Dirty alleys and corners are being thoroughly cleansed, and the whitening-brush is in active and exemplary operation in hundreds of yards and houses, both in the hands of the corporation—by deputy, of course—and amongst the poorer classes, in whose hands they have placed it for the like purpose, and by whom even the loan of the brush and the gift of the whitewash have been thankfully and readily accepted.

WESTMINSTER COURT OF SEWERS.

A SPECIAL court was held on Friday, the 26th ult., Capt. G. Bague, R.N., in the chair.

Sanitary Improvement of Hammersmith and Fulham.—Mr. Bathurst brought before the court the motion of which he had given notice, relative to the memorial presented at the last court from the parishes of Hammersmith and Fulham, praying for sanitary improvement, and moved that the application of the Board of Guardians of the Hammersmith and Fulham Union to this court be referred to the surveyor.

Mr. Gunter having borne testimony to the necessity of the measure, the question was put and unanimously adopted.

Strutton Ground, Westminster.—The clerk reported, that in consequence of statements received, that in many cases the drainage of Strutton Gound, Westminster, was passing through apartments which were inhabited, notices had been served on the owners of the property, calling upon them to drain their houses into the sewer, under the authority of the new Act.

Deputation from the Marylebone Vestry.—Three gentlemen attended the court as a deputation from the vestry of Marylebone, to ask permission of the court for the removal of certain gulley-holes in Portland Mews, by which a great improvement might be effected. The surveyor said he had examined the place, and found that several of the gulley-holes complained of were surreptitious, and not laid in under the authority of this court. Mr. T. L. Donaldson hoped, with this explanation, the matter would be referred back to the committee from which these gentlemen attended. As they were, however, present, he wished shortly to refer to the report issued a fortnight since by the Marylebone vestry. (The commissioner then read the passage, which stated that this court had authorised the large number of gulley-holes, and stated that the court had done their utmost to prevent the large number of gulley-holes, but that the parish surveyors insisted upon their being put down.) He wished also to call their attention to another subject, to show how little the vestry understood the authority of this court. He then read the following passage from the report in reference to the formation of cesspools:—"The evils are not confined to the absence of sufficient drainage provided by the commissioners themselves, but have increased by the absolute refusal of the commissioners to permit others to carry out those needful improvements which their culpable negligence has omitted. Every person who has at all considered the subject must be aware, that the formation of cesspools underneath and contiguous to inhabited houses is a fearful source of sickness and disease, and yet the formation of these noxious depositories of filth has been for a long series of years forced upon the public by the absurd practice, on the part of the Sewers Commissioners, of preventing any drain from a closet being laid into a sewer; of late, however, and since the evil has caused a frightful accumulation, the commissioners themselves are loud in their condemnation of cesspools." In reference to this, the truth was, that for half a century such a practice had not existed in this court, but, on the contrary, they were anxious and had done all in their power to compel parties to drain their houses into the public sewers.

The Chairman said there could be no doubt the report was a tissue of misrepresentations.

The question was referred back to the committee.

The deputation said they should not fail to represent all these facts to the vestry.

The Action against Mrs. Webb.—The solicitor reported, that this morning he had ascertained that a declaration had been filed in the Palace-court by Mr. Farlar (on the part of Mr. Gigner) against Mrs. Webb, charging her with trespass in entering his sewer. After a conversation it was resolved, "That the solicitor, having laid before the court a copy of a declaration in the case of 'Gigner v. Webb,' resolved, that the solicitors of this court do cause a plea to be made that the trespass complained of was done by and under the authority of this court, or such plea as counsel shall advise. Resolved also, that if it can be done, the cause be removed into the Court of Queen's Bench, and that the address of the plaintiff be obtained."

The Want of Drainage near Buckingham-palace.—The clerk said he had received a communication from the Commissioners of Woods and Forests, which was as follows:—

"Office of Woods and Forests,
"Nov. 23, 1847.

"On the part of her Majesty's Commissioners of Woods and Forests, I transmit to you a copy of a letter which they have received from Mr. Portwine, the honorary secretary to the St. Margaret's Association, representing the defective state of the sewerage of certain streets in the vicinity of Buckingham-palace, the houses in which streets are the property of the Crown.

"The subject of the want of drainage in these streets was under the attention of this board towards the close of the year 1843, and an extract from a report of Mr. Hogg, the clerk of the works at Buckingham-palace, was transmitted to you to be laid before the Court of Sewers for Westminster, with a request of this board to be made acquainted with the terms upon which the court would undertake the works necessary to place the locality in a proper state of drainage. In reply to that communication the board received a letter dated January 10, 1844, stating that the Court of Sewers had caused a plan and specifications to be prepared by their surveyors, and transmitted with your letter three unopened tenders for the performance of the work. (The document then stated the amount of the estimates.) From Mr. Portwine's letter, however, it appears very necessary that some measures should be adopted for procuring a proper sewerage for the property in question; and as the board understand that by a recent Act of Parliament, greater powers as to the construction of sewers in places destitute of that accommodation are given to the Court of Sewers of Westminster, I have to request that you will again bring the subject under their consideration, with a view to their constructing such a sewer as shall be necessary for the locality above mentioned.

"I have to observe, that as the houses in the streets referred to by Mr. Portwine are for the most part subject to long leases, it appears to the board reasonable that the lessees and occupiers, who will derive the chief benefit from the sewer, should be at some portion of the expense thereof, instead of having it all fall on the Crown as the freeholder. Whether or not the Court of Sewers have any power of apportioning it, the Board are not aware; but if not, they can perhaps point out a method of compelling lessees and occupiers to defray a share of the cost, which the Board apprehended there would be some difficulty in effecting.

"I am, Sir, your obedient servant,
"T. MILNE."

Accompanying the letter was a long memorial from the inhabitants of Catherine-street, Palace-street, &c., Pimlico, complaining that typhus fever raged in that locality from the want of drainage, and that this nuisance existed within 200 yards of Buckingham-palace.

As the matter has been for some time under consideration, the letter and memorial were referred to the surveyor, and an acknowledgment of them ordered to be sent to the Commissioners of Woods and Forests.

The Expiring Commission.—Mr. Hertslet said, in obedience to the order of the last court, he had written to the Lord Chancellor to ask when it would suit his lordship's convenience to receive a deputation from this court on the subject of the expiring commission, but that he had received no answer whatever to his communication. Mr. Le Breton was anxious to know, if the commission expired, into whose hands the property would pass? Mr. Broughton said, that such an anomalous position as the commission being allowed to expire he could scarcely believe would take place, short as was the time of its duration. If any property of the commission was stolen, the Commissioners of Sewers at present were the prosecutors, but no such persons could be charged when the commission became extinct, as there would then be no Commissioners of Sewers, and it might become a question, whether parties would even pay the sewer rates. It certainly would be a most remarkable feature if the commission was allowed to expire without a substitute being provided. They should, however, be prepared, and, if they were to become defunct, let them, like Cæsar, wrap their cloaks around them, and die with dignity. The chairman said, although the business of the court, after the commission was expired, would fall on the county magistrates, still he felt assured that the body of the magistracy would not attend to execute the duties of the commission unless they received the appointment from the Lord Chancellor. It was suggested, that the illness of the Lord Chancellor might account for no answer being received.

GOVERNMENT SCHOOL OF DESIGN.—The new appointments at the school, now all complete, are,—Mr. William Dyce, A.R.A., master of the class of ornament; Mr. Richard Redgrave, A.R.A., master of flower-drawing and occasional lecturer; Mr. Henry Townsend, master of class of form; Mr. J. C. Horsley, master of class of colour; Mr. C. J. Richardson, master of geometrical, architectural, or perspective drawing; Mr. Burchett and Mr. Denby, assistant masters. The first lecture is to be given this (Friday) evening, at eight o'clock, by Mr. Poynter, on the arabesques of the Vatican.

New Books.

Aerial Navigation. By DÆDALUS BRITANNICUS. Gilbert, Paternoster-row, 1847.

THE joker who proposed to traverse the sky by means of a congreve roeket, and to descend with the aid of his umbrella, enunciated the real circumstances under which aerial navigation may be hoped for. To ascend by being lighter than the air, is to be less powerful than the air, and admits of no strife against it. A steam-engine *may*, one of these days, take us with certainty through the clouds to a given point, but a bag of hydrogen gas *alone* never will.

The author of the pamphlet named at the head of this notice, seems to have a clear idea of this; but whether or not the means he points out are calculated to effect the desired end, is quite another matter. He proposes to obtain power equal to that of eighty horses, acting on wing-shaped adjuncts to a balloon, by the atmospheric pressure on a vacuum formed by ignition of gases. We hope, for the sake of his wife and family, if "Dædalus Britannicus" have them, that no good-natured people will encourage him in the construction of the machine shadowed forth in the pamphlet before us.

Correspondence.

THE DISGRACEFUL STATE OF WESTMINSTER ABBEY.

SIR,—Having had of late sufficient time for examining the architectural beauties of this magnificent edifice, I could not help (as is the case with many other visitors) being struck with the disgraceful and unclean appearance of the small chapels, and particularly that of Henry the Seventh. The niggardly practice of exacting the paltry sum of sixpence for their exhibition has been so often ridiculed and exposed, that I deem it unnecessary to trouble you with any remarks upon that subject. The public, at least, may expect to find the objects of exhibition as clean as their mutilated condition will allow; but even this is not the case, for many monuments are so completely covered with dust as to render their identity a difficult matter. The magnificent effigy of William de Vallance, in the chapel of St. Edmund, formed of wood and covered with a species of copper-gilt and enamel, is, although one of the finest objects in the church, hardly ever noticed by the casual visitor; but, were the filth removed, its beauties would at once attract the wonder and attention of every passer-by. This is not the only instance. The tombs of the kings in the Chapel of the Confessor are in as filthy a state; as is also the magnificent stall-work in Henry the Seventh's Chapel. I cannot help observing how much better the modern monuments contained in the nave and transepts are preserved, in comparison with those before alluded to. Men have of late been employed in cleaning those huge memorials which, so far from decorating that noble edifice, only disfigure it; whereas, its ancient architectural beauties are allowed to moulder away unnoticed and uncared for. The present dean and chapter, in some of the late alterations, have shewn good taste and selection (if we except the scheme for extending the choir into the transepts); and I cannot conceive the reason why they have suffered so important a part as the whole east end of the church, to remain in its present dilapidated and unclean state, this being without doubt the most attractive portion of the abbey. May I be allowed, then, to suggest that that part should be cleaned and restored to its pristine beauty forthwith?

I am, Sir, &c., E. DAVIS.

NAMES OF STREETS.

SIR,—From the nature of your periodical, I infer that any suggestion tending to an improvement either in our streets or buildings is acceptable to you, therefore I submit to you the following alteration in placing the names of streets.

That which is to be *read* ought to be as near the level of the eye as possible, according to the standard of general height. This arrangement cannot be effected on the walls of buildings, because of the interruption of windows, &c. I therefore propose that the names be removed from that locality, and that they be

placed on a narrow strip or bar across the lamp-posts, at each corner, and occasionally in the centre of the street. The light will thus fall immediately on the name, which I further propose should be round and embossed, so that, if the light should be extinguished, it may be *felt*. At present there is a bar for the convenience of the lamp-lighter, but the one for the name of the street would be placed much lower, and would not interfere with the other. It may be feared that the name thus placed within the reach of the idle or thoughtless may be torn down or defaced; but the police will guard it till it ceases to be a novelty, when it will no longer attract particular attention.

Should this plan be adopted, I should like to have the credit of the suggestion.

I am, Sir, &c., R. J.

55, Coleshill-street, Eaton-square, Pimlico.

Miscellanea.

The Royal Society's Dinner.—The anniversary dinner of the Royal Society, whereat the Marquis of Northampton ably presided, passed off pleasantly. The Dean of Westminster (Dr. Buckland), in referring to an almost exploded notion, that scientific investigations were opposed to religion, made an excellent speech. General Pasley, who replied for the army, traced briefly the progress of the improvements in that wonderful example of human ingenuity, the locomotive engine, mainly due to Trevithick and Mr. George Stephenson. Sir Robert Harry Inglis spoke several times well. Sir John Rennie, on the part of the civil engineers, shewed that in all their operations they had to seek the aid of science. Sir John Lubbock advanced the claims to consideration of the London University, and said in respect of Oxford and Cambridge, there could be no feelings of rivalry in such a cause as education. Mr. Edward Blore, when replying for the Royal Academy, no academician being present, referred to what was going on in Westminster Abbey as "a great work," and said he had no doubt the public would approve, when the whole was completed. Colonel Sykes, Captain Smyth, Sir Henry Ellis, Mr. Christie, and others, also addressed the meeting. The annual medals had been presented in the morning to Sir John Herschell, Mr. Groves, and Mr. Fownes.

Matters Sanitary. — Meetings have been held,—in Holborn, by the 'Co-operative League,' in support of health of towns measures,—and at Kingsland, by the inhabitants, against the present local boards and in favour of other measures.——The baths and washhouse committee met at Euston-square lately, and resolved to supply the poorer classes of the western district of the metropolis with disinfecting agents, limewash, pails and brushes, &c.——The City authorities, taking time by the forelock, have announced an application to Parliament for increased and all-comprehensive sanitary power over cesspools, sewers, cemeteries, slaughter-houses, smoke, &c. &c. ——The 'New Smithfield, or Great Metropolitan Cattle Market and Abattoirs Company,' are also in the field; as are the Metropolitan Sewage Manure Company, who are to begin with a distribution of liquid manure to the Fulham meadow and garden districts.——At Wakefield and Halifax, too, applications to Parliament by 'Sewage Manure' companies, for bills to form conduits, aqueducts, &c. have been announced.——A medical 'inspector of nuisances' has been appointed at Wolverhampton, under 9 & 10 Vict. c. 96.——Private and confidential hints as to local nuisances have been advertised for by the authorities at Sheffield.——The medical men of Hull have formed themselves into a local board of sanitary inquiry.——The Newcastle and Gateshead Sanitary Association seems to be a most active and exemplary one. It, moreover, contributes to the ways and means of the metropolitan parent association, as every such association ought to do, who wish to have 'a friend at court,' or a helping hand at head-quarters. ——Sir Geo. Grey has been making repeated sanitary inquiries of the Lord Provost of Edinburgh, and recommending disinfecting agents, &c. in fever prevalent there.——A public meeting was lately to be forthwith called to form a Health of Towns' Association at Glasgow.

A Hard Case, if True.—A correspondent of a morning paper, mentioning some instances of injustice in respect of imprisonment for debt, makes the following statement, which certainly demands the attention of the Commissioners of Woods and Forests. "Two brothers, builders, in a respectable way of business, about a twelvemonth ago took some building ground near Battersea-bridge, upon which they constructed fourteen houses, expending in building materials alone 4,000*l.*, besides the value of the land. A bill was obtained soon after in Parliament for a park, on the very spot, and the Commissioners of Woods and Forests immediately took hold of the property, for which the owners made a claim of about 12,000*l.* The Government surveyor valued it at about double the value of the materials; but weeks and months passed over, and the owners could not obtain one farthing of that sum. They were told that as soon as the necessary grant was obtained from Parliament they should be paid, and in that way they were put off from time to time, whilst their business, the whole of their capital having been locked up in the property in question, went to wreck and ruin. At length their acceptances, given for part of the building materials, became due, and the creditors, as duly authorised by law, at once put them into prison, where they have been lingering now for *six months*. All their representations to the Commissioners of Woods and Forests have been treated with that contempt which it is but natural (being an every-day occurrence) that superior authorities should show towards a paltry tradesman, who has the bad breeding to "dun" them, and to tell them that it is their fault that he is rotting in prison, deprived of his bread, of all comforts of life, and punished like a criminal."

New Patents.—Amongst the more recent patents taken out in Ireland, we observe one 'for ventilating buildings, carriages, chimneys, and other places,' by Mr. Joseph Henry Tuck, of Paris; and another for 'a new mode of treating and applying wrought-iron,' by Mr. William Rocke, of Dudley, 'invented by him after much trouble and expense.'

Honour to Ingenuity and Probity.—It is said that the King of the Belgians has created a mark of distinction in the shape of a silver medal, to be worn on the left breast, for such artizans and workmen as have given proofs of superior skill and judgment in their respective arts and trades, and been at the same time of irreproachable conduct.

Bridge over the Ohio.—It is said that the plan of a bridge across the Ohio, at Wheeling, has been agreed upon. It is to be supported by two towers on each bank, 1,010 feet from centre to centre, 100 feet above the bed of the river, and 60 above the floor of the bridge.

The Works in Ely Cathedral.—We have already spoken at some length of this fine building and the works now going on there. Of all the improvements, the most conspicuous will be in the choir, which now extends from the east end, a distance of 101 feet, to the ante-choir or sermon-place. This latter measures 53 feet to the octagon, and is to be thrown into the choir, the length of which will then be 154 feet. It is proposed, in addition, to throw open all the arches of the present choir to the side aisles (the roofs of which have been restored), restoring the tombs of the Bishops De Luda (1290), Redman (1505), Kilkenny (1257, the most ancient in the cathedral), Hotham (1337), Barnett and Northwold (1252), and of John Lord Tiptoft, Earl of Worcester, and his two wives (1471). It is proposed to remove the present stall-work (arranged in 1770) and to provide new subsellia and other fittings to the three arches of Bishop Hotham. A screen is to be erected to separate the new choir from the lantern (the organ being removed into the triforium on the north side). The polishing the great marble piers of the choir and their capitals (hitherto disguised by paint and wash), is now in progress, and an enriched reredos and pavement is to be provided. The unsightly combination of woodwork and plaster is removed from the east end of the choir, and the ruined tomb of the Cardinal de Luxemburgh, on the south side of the altar, has been restored. The arrangements above enumerated will have the effect of securing the means of accommodating a much larger congregation in the choir, and will leave nearly unbroken the entire view of the cathedral from its western to its eastern end. The rich chapel of Bishop Alcock has been restored, at the expense of the Society of Jesus College, of which he was the founder. The pinnacles, pendants, and niches have been restored, as far as practicable; and a floor of encaustic tiles is to be laid down, the designs for which are now in preparation. According to the *Cambridgeshire Independent Press*, the expense of completing the enlargement of the choir in the manner proposed has been estimated at not less than 8,000*l.*; and if the works are extended to the lantern (as is proposed, in case the amount of the subscription warrant it), a much larger sum would be required; it is, however, extremely difficult to estimate beforehand the cost of such undertakings, where the amount and character of much of the work to be done can only be ascertained whilst the repairs are in progress.

Rapid Make of Iron.—Such is the celerity in manufacturing iron in this part of the country, that instances have occurred in which the calcined ore has been converted into rails, and actually delivered in Liverpool within two days. Bar and sheet-iron can, of course, be manufactured with similar rapidity.—*Wolverhampton Chronicle.*

Projected Works, &c.—Tenders have been called for by advertisement for the execution of certain builder's works at the Bedford Lunatic Asylum; for the whole or part of the excavation of about three miles of a new channel for the River Dun from Doncaster to Landall; for deepening four wells at the barracks at Winchester; for digging and putting in the foundations of St. Mark's, Wolverhampton; for excavating a further open cutting and earthwork for driving a plant or level at Loughor, near Swansea; and for a supply of 10,000 loads of British oak timber, 3,700 loads of British oak thick stuff and plank, and 300,000 British oak treenails for the Admiralty: also for lighting roads in Fulham parish with gas.

TO CORRESPONDENTS.

"*Justice.*"—It is neither "a general custom nor a legal demand" for "an architect to require a per centage from a contractor on the amount of his contract."

"*M.*" shall have an answer.

"*E. and W. J.*"—We have already expressed a favourable opinion of Baillie's slide-valve ventilator.

"*M. N.*"—We will call for more information.

"*J. C.*"—What a surveyor does he should be paid for.

"*A. E. C.*"—Make a formal application to the commissioners.

"*An Original Subscriber.*"—Arnott's valve will be found useful.

"*W. W.*"—Alum water is sometimes used to prepare paper for tinting. The question had not reached us.

Received—"G. T." "J. A." "W. F." (too late). "J. W." "J. M. McC." "D. H." "J. W. D." "W. C." "A Londoner" (will appear). "J. H. R." "Constant Reader." "G. B." "X. Y. Z."

Books Received.—"Dolman's Magazine," December. "Thoughts on the Degradation of Science." By F. R. S. (Rodwell, Bond-street.) "A Manual of Gothic Mouldings." By F. A. Paley. (John Van Voorst, Paternoster-row.) Second edition. "Art-Union Journal," for December. "Caldwell's Musical Journal," for December: Part 6. "Minutes of the Committee of Council on Education." 2 vols. 1847.

"*Books, Prices, and Addresses.*"—We have not time to point out books or find addresses.

ADVERTISEMENTS.

SMITH'S SUPERIOR GLAZED BROWN STONE SOCKET DRAIN-PIPES, 2 feet lengths, in various bores, from 2 to 9 inches, patronised by the Right Hon. and Hon. Commissioners of Sewers for the city of Westminster. To be had at the manufactory, 72, Princes-street, Lambeth.—A stock of elbows, stink-traps, and various shapes always on hand.

HOLBORN AND FINSBURY SEWERS, MIDDLESEX.

THE COMMISSIONERS of SEWERS for the LIMITS give NOTICE, that their Office, Hatton-garden, is open daily between the hours of Ten and Four, where information can be obtained (gratis) by persons about to Purchase or Rent Houses or Property, or take Land for Building purposes, of the situation and level of the public Sewers, capable of affording sufficient Drainage, and which they recommend all such Persons to apply for at the above office. By the Court,

STABLE and LUSH, Clerks.

THE Commissioners of Sewers for the City and Liberty of Westminster, and part of the County of Middlesex, HEREBY GIVE NOTICE, that by an Act of Parliament made and passed in the session of Parliament holden in the 10th and 11th years of the reign of her present Majesty, chapter 79 (local and personal), intituled "An Act to explain and amend the laws of Sewers relating to the City and Liberty of Westminster, and part of the County of Middlesex," provision is made for the more effectually draining houses and property; and with a view thereto it is enacted, that where houses built before or after the passing of the said Act (2nd July, 1847), shall not be drained to the satisfaction of the Commissioners of Sewers, and if there shall be a sewer within 100 feet of any front of the building or of any inclosure about the same, it shall be lawful for the Commissioners to order the owners or occupiers, at their expense, to drain such house, by continuing the sewer along their frontage, and by making a drain to lead thereto; and if there be already a sewer in front, adapted to the drainage, then, that a covered drain into it shall be made, as the Commissioners shall direct, and that the parties shall contribute to the expense of the original construction of the sewer, if built within thirty-five years before the passing of the said Act. And by the said Act it is declared that no drains shall be made without first giving notice to the Commissioners, who are to regulate the construction thereof. And it is by the said Act further provided, that all drains and water-courses, as well within as without houses and other property, shall be cleansed and repaired by and at the cost of the owners or occupiers. The Commissioners are by the Act fully empowered to punish by fines and penalties any persons who may contravene the Act; and it is particularly required that all persons will proceed to comply with these regulations.

An officer of the Commissioners will be in attendance at the office, No. 1, Greek-street, Soho, from 9 in the morning until 4 in the afternoon, every day (Sunday excepted), when every information will be given to parties to assist them in complying with the provisions of the Act.—By order of the Court,

LEWIS C. HERTSLET, Clerk.